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JUN 06 2004



# *What's in a Meal?*



A Resource Manual for Providing Nutritious Meals  
in the Child and Adult Care Food Program

USDA's Dietary Guidance Working Group and DHHS's Committee on Dietary Guidance have approved What's in a Meal? as consistent with the Dietary Guidelines for Americans.



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The Child Nutrition Programs are open to all eligible children and adults regardless of race, color, national origin, sex, age or handicap. Any person who believes he or she has been discriminated against in any USDA-related activity should write immediately to the Secretary of Agriculture, Washington, DC 20250.





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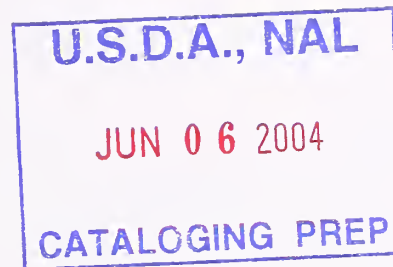
## Errata Sheet for Fourth Edition, August 2003 "What's In a Meal"

NFSMI reproduces and distributes the "What's In a Meal" publication that is written by the USDA/FNS Midwest Regional Office. Please use this errata sheet to update your publication.

- 1) Page VIII-28 Kiwi fruit comment will read: About six  $\frac{1}{4}$  -inch slices equals  $\frac{1}{4}$  cup serving.
- 2) Page VIII-52 Breast milk comment will read: Breast milk is a creditable meal component for infants birth through 11 months.
- 3) Page VIII-56 Milk, whole comment will read: The only creditable alternative to breast milk is iron-fortified infant formula. Whole cow's milk is not creditable for infants.

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# Introduction

The United States Department of Agriculture Food and Nutrition Service (FNS) convened a task force in 1993 to prepare this manual which is intended to assist Child and Adult Care Food Program (CACFP) personnel in providing quality, nutritious meals which comply with CACFP meal pattern requirements. The task force was made up of local family day care providers, child care center directors, sponsoring organization directors and nutritionists, State Department of Education technical staff and USDA Food and Nutrition Service specialists.

This manual contains sections on nutrition, recipe modification, food labeling, feeding infants, food handling and sanitation, cultural foods, recipe evaluation and crediting foods. This fourth edition incorporates revisions to meet the 2000 Dietary Guidelines for Americans. It also reflects yield changes based on the Food Buying Guide for Child Nutrition Programs, 2001. Additional revisions were made based on comments from many CACFP professionals to ensure that charts and instructions are inclusive and easy to use.

USDA commends all task force members for contributing their time and energy to make this a successful guide. Special thanks to the Dietary Guidance Working Group, the Food and Nutrition Service Center for Policy and Promotion staff and State agency staff for reviewing the document.

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# Grasping Nutrition Concepts

## Following the Dietary Guidelines

The *Dietary Guidelines for Americans*, 2000, developed by the United States Department of Agriculture (USDA) and the Department of Health and Human Services (DHHS), provide general diet and lifestyle recommendations for healthy Americans ages two years and over. Try to follow these guidelines when planning menus for the children in your care and when making food choices for yourself.

- **Aim for fitness.**

Aim for a healthy weight.

Be physically active each day.

- **Build a healthy base.**

Let the Pyramid guide your food choices.

Choose a variety of grains daily, especially whole grains.

Choose a variety of fruits and vegetables daily.

Keep food safe to eat.

- **Choose sensibly.**

Choose a diet that is low in saturated

fat and cholesterol and moderate in total fat.

Choose beverages and foods to moderate your intake of sugars.

Choose and prepare foods with less salt.

If you drink alcoholic beverages, do so in moderation.

## Key Elements of the Dietary Guidelines

Healthful diets include a variety of nutritious foods from all food groups. It is important to remember that no single food can supply all necessary nutrients. All foods can be part of a healthy diet.

When planning meals, moderation is always the key. Eating too much or too little of any one food or nutrient can be unhealthy.

Good health depends on a number of factors, including: diet, heredity, lifestyle (dietary patterns, physical activity, occupation), health care and the environment.







## Using the Food Guide Pyramid

The Food Guide Pyramid, shown on the next page, is a graphic illustration of the *Dietary Guidelines*. The Food Guide Pyramid helps you choose what and how much to eat from each food group to get necessary nutrients and not too much fat, saturated fat, cholesterol, and sugar. The food groups include: (1) the bread, cereal, rice and pasta group; (2) the vegetable group; (3) the fruit group; (4) the milk, yogurt and cheese group; and (5) the meat, poultry, fish, dry beans, eggs and nuts group.

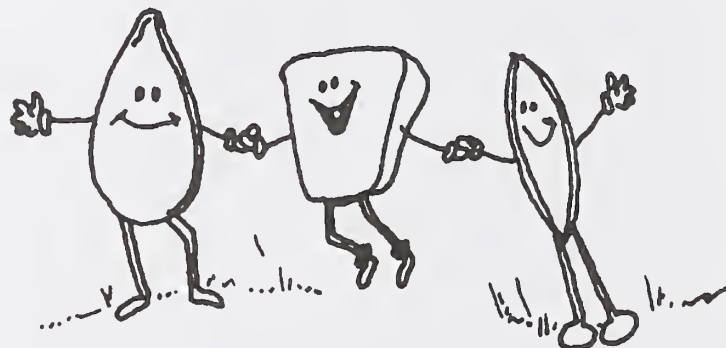
The base of the pyramid emphasizes the consumption of bread, cereals, rice, pasta, vegetables and fruits. The *Dietary Guidelines* recommend moderate intakes of foods that contain fat and a low intake of saturated fat and cholesterol. The Dietary Guidelines also recommend moderating the intake of sugars. The small tip shows that fats, oils and sweets should be used sparingly because they provide calories and little else nutritionally.

The Food Guide Pyramid recommends a range in the number of servings of foods that should be eaten daily. Preschool children need the same variety of foods as older family members do, but may need fewer calories. For fewer calories, they can eat the lower number of the range of daily suggested servings. Also, limit the amount of added fats, oils and sweets at the top of the pyramid.

Throughout the Pyramid, tiny circles symbolize naturally occurring and added fat. Tiny triangles symbolize sugar added to foods in processing or at the table.

These symbols show that many foods contribute fat and sugar to the diet.

Each of the food groups of the Food Guide Pyramid provides important nutrients. Because one food group cannot provide all necessary nutrients, it is important to choose foods daily from all food groups.



Food Group	Source Of
Bread, Cereal, Rice and Pasta Group	carbohydrate, fiber, riboflavin, niacin, thiamin, folate, iron
Vegetable Group	complex carbohydrate, fiber, vitamins A, B-6 and C, folate, potassium, iron, magnesium
Fruit Group	carbohydrate, fiber, potassium, folate, vitamin A, vitamin C
Meat, Poultry, Fish, Dry Beans, Eggs and Nuts Group (Choose cooked dry beans and peas, fish, and lean meats and poultry with skin taken off the poultry.)	protein, iron, phosphorus, potassium, B vitamins
Milk, Yogurt and Cheese Group (Choose fat-free or low fat dairy products.)	protein, carbohydrate, calcium, phosphorus, vitamins A, B-12 and D, riboflavin



# Food Guide Pyramid

## A Guide to Daily Food Choices

Fats, Oils, & Sweets  
**USE SPARINGLY**

### KEY

◻ Fat (naturally occurring and added)

◼ Sugars (added)

These symbols show fat and added sugars in foods.

Milk, Yogurt, & Cheese Group  
**2-3 SERVINGS**

Meat, Poultry, Fish, Dry Beans, Eggs, & Nuts Group  
**2-3 SERVINGS**

Vegetable Group  
**3-5 SERVINGS**

Fruit Group  
**2-4 SERVINGS**

Bread, Cereal, Rice, & Pasta Group  
**6-11 SERVINGS**

Source: U.S. Department of Agriculture/U.S. Department of Health and Human Services

Use the Food Guide Pyramid to help you eat better every day....the Dietary Guidelines way. Start with plenty of Breads, Cereals, Rice, and Pasta; at least two servings of Fruits and three servings of Vegetables. Add two to three servings from the Milk group and two to three servings from the Meat and Bean group.

Each of these food groups provides some, but not all, of the nutrients you need. No one food group is more important than another--for good health you need them all. Go easy on fats, saturated fats, oils, and sweets, the foods in the small tip of the Pyramid.

*For more information on the Food Guide Pyramid go to the United States Department of Agriculture's Center for Nutrition Policy and Promotion website at <http://www.cnpp.usda.gov>*





## Understanding Nutrition

Many different nutrients are needed for good health. These include **carbohydrate, fat, protein, vitamins, minerals and water**. Most foods contain more than one nutrient.

The amount of energy that can be provided by a food is measured in calories. Carbohydrate, fat and protein provide calories to the body. If a person does not eat enough calories, the body uses protein and fat stores for energy. Eating too many calories will result in weight gain. The number of calories from a food depends on how much protein, carbohydrate and fat are present.

Descriptions of the six nutrients follow.

### Carbohydrate

Foods supply carbohydrate in three forms: **sugars, starches and dietary fiber**. One gram of carbohydrate provides four calories.

**Sugars** contribute calories but few vitamins and minerals. There are many different types of sugars. They include: brown sugar, cane sugar, corn sweetener, corn syrup, dextrose, fructose, glucose, high fructose corn syrup, honey, invert sugar, lactose, malt syrup, maltose, maple syrup, molasses, sucrose and sugar syrup.

**Starch** is a major source of energy. Sources of starch are: grains (wheat, oats, corn, rice, etc.) and products made from grains such as flour, pasta, breads and cereals. Vegetables such as potatoes,

sweet potatoes, dry beans and dry peas are also sources of starch.

**Dietary fiber** is present in plant foods. It is not broken down during digestion. Eating fiber-containing foods, such as fruits, vegetables and whole grains promotes proper bowel function. Dietary fiber provides bulk for stool formation and prevents constipation.

Consumption of dietary fiber may help satisfy the appetite by creating a satisfying full feeling. Eating plenty of fruits, vegetables and whole grain foods as part of a healthy eating pattern may also help protect against some chronic diseases.

Sources of dietary fiber are vegetables, fruit, dry beans and peas, and whole grain products such as brown rice, bulgur, whole grain corn, oatmeal, popcorn, pearl barley, whole oats, whole rye and whole wheat.

See the chapter, "Modifying Recipes and Menus to Meet the *Dietary Guidelines for Americans*", for tips on increasing dietary fiber.







## Fat

Fats supply energy and essential fatty acids. Fats are the most concentrated energy source in the diet. They provide nine calories of energy per gram, twice as many calories per gram as provided by protein or carbohydrate.

The foods you eat should contain some fat. Fats are required for brain development, vision and the formation of some hormones. Fatty acids are carriers of the fat-soluble vitamins (vitamins A, D, E and K).

The *Dietary Guidelines for Americans* recommend that **30% or less of a diet's total calories come from fat and that less than 10% of calories come from saturated fat.**

**Saturated fatty acids** are present in many foods. Animal foods contain more saturated fats than plants. Foods high in saturated fats tend to raise blood cholesterol. These foods include high fat dairy products (cheese, whole milk, cream butter, and regular ice cream), fatty fresh and processed meats, skin and fat of poultry, lard, palm oil and coconut oil. Keep your intake low for these foods.

Products containing hydrogenated vegetable oils, such as shortening and stick margarine, may contain trans fatty



*HINT: The Dietary Guidelines recommend that 30% or less of a diet's total calories come from fat and less than 10% of calories come from saturated fat.*

acids. Trans fatty acids act like saturated fatty acids in that they tend to raise blood cholesterol. Other foods that may contain hydrogenated oils include commercially fried foods and baked products (cookies, crackers, muffins, snack foods, chips, pie crust, French fries, doughnuts, etc.)

**Unsaturated fats** are liquid at room temperature. Unsaturated fats (oils) do not raise blood cholesterol. Unsaturated fats occur in vegetable oils, most nuts, olives, avocados, and fatty fish like salmon. Monounsaturated and polyunsaturated oils are both unsaturated fats. Olive, canola and peanut oils are high in monounsaturated fatty acids. Polyunsaturated fats are found in soybean oil, corn oil, cottonseed oil and many kinds of nuts. Some fish, such as salmon, tuna, and mackerel, contain omega-3 fatty acids that are being studied to determine if they offer protection against heart disease. Use moderate amounts of food high in unsaturated fats. Avoid excess calories.

Total Daily Calories	Fat (no more than 30% of calories)	Saturated Fat (less than 10% of calories)
1000 calories	33 grams	< 11 grams
1500 calories	50 grams	< 16 grams
2000 calories	66 grams	< 22 grams
2500 calories	83 grams	< 27 grams



**Cholesterol** is a fat-like substance found in humans and animals. Foods that are high in cholesterol also tend to raise blood cholesterol. These foods include liver and other organ meats, egg yolks, and dairy fats. In addition to getting cholesterol from food, our bodies make cholesterol.

For information on fat content in foods, see the section, "Understanding Food Labels: What's in a Food?" Also, for information on reducing fat in recipes or menus, see the section, "Modifying Recipes and Menus to Meet the *Dietary Guidelines for Americans*."

### Protein

Proteins are made of amino acids and are needed for growth, maintenance and replacement of body tissues. They also form the hormones and enzymes used to regulate body processes. Each gram of protein provides four calories of energy. Excess protein may be used by the body for energy or stored as body fat.

### Vitamins

Vitamins are substances needed by the body in very small amounts. Many chemical reactions in the body depend on vitamins. They help release energy from carbohydrate, fat and protein.



*The Dietary Guidelines apply to the diet over several days, not to a single meal or food.*

### Minerals

Minerals are needed in small amounts. Calcium, phosphorus and fluoride are used to build strong bones and teeth. Iron is used to make hemoglobin in red blood cells. Iodine is used to make thyroid hormone. Minerals maintain body fluids and chemical reactions.

The *Dietary Guidelines* suggest that you choose and prepare foods with less salt. Most of the salt you eat comes from foods that have salt added during food processing or during preparation in a restaurant or at home.

Salt is the main source of sodium in foods. Table salt contains sodium and chloride. Both minerals are needed only in small quantities by the body. Too much sodium has been related to high blood pressure.

For information on reducing sodium in recipes, see the section, "Modifying Recipes and Menus to Meet the *Dietary Guidelines for Americans*."

### Water

Water is needed to replace body water lost in urine and sweat. It helps transport nutrients, remove wastes and regulate body temperature. Water is an important part of an adequate diet.





## Nutritive Value Of Foods

To include the greatest amount of nutrients and meet the *Dietary Guidelines for Americans*, choose a variety of foods for each meal throughout the week. Some foods provide more nutrients than others. A food may be a good source of some vitamins and minerals, but still lack other important ones. A “perfect” food with all essential nutrients does not exist. Also, by regularly serving a variety of foods, children will not become bored with the foods offered and will learn healthy food habits.



Examples of foods that are sources of various nutrients are listed below.

*Food groups referenced are based on CACFP meal pattern components. Examples provided are creditable foods.*

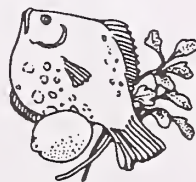
### Protein

Protein is important for the continued growth, regulation and maintenance of the body's tissues. Some examples of foods that are sources of protein include:

**Meat/Meat Alternates:** lean beef, low-fat cheeses, dry beans, dry peas, fish, lentils, nuts, nut butters, eggs, lean pork, poultry, low-fat yogurt

**Milk:** fluid low-fat or fat-free milk

**Vegetables:** dry beans, dry peas



### Fiber

Fiber promotes the elimination of the body's waste. Eating plenty of fiber rich foods as part of a healthful eating pattern may help protect against chronic diseases. It also satisfies the appetite by creating a full feeling.

Foods that are sources of fiber include:

**Fruits:** apples, bananas, blueberries, cantaloupe, cherries, peaches, pears, prunes, oranges, raspberries, strawberries

**Vegetables:** broccoli, carrots, cauliflower, celery, corn, green beans, peppers, potatoes, tomatoes

**Grains/Breads:** whole grain products (made from whole grain corn, whole oats, whole rye, or whole wheat), brown rice, bulgar, oatmeal, pearl barley

**Meat/Meat Alternates:** dry beans, dry peas, lentils

### Iron

Iron, a mineral, functions primarily as a carrier of oxygen in the body, both in the blood and muscles.

Sources of iron include:

**Meat/Meat Alternates:** dry beans, dry peas, eggs, lean meat, poultry

**Grains/Breads:** whole grain, fortified or enriched breads and cereals

**Vegetables:** dark green leafy vegetables, dry beans, dry peas, lima beans



## Calcium

Calcium, a mineral, is important for the growth and maintenance of bones and teeth. It is also necessary for muscle contraction, blood clotting, and maintenance of cell membranes.

Food sources of calcium include:

**Milk:** fluid low-fat milk

**Vegetables:** broccoli, spinach, turnip greens, collards

**Fruits:** oranges, calcium-fortified orange juice

**Meat/Meat Alternates:** low-fat cheeses, low-fat yogurt, canned salmon or sardines

**Grains/Breads:** calcium fortified breads and breakfast cereals (read the label).

## Vitamin C

Vitamin C, a water soluble vitamin, is important in the formation of collagen, a protein that gives structure to bones and muscles. Vitamin C also aids in the absorption of iron. It is an antioxidant.

Foods sources of vitamin C include:

**Fruits:** cantaloupe, citrus fruits and juices (grapefruit, orange, etc.), kiwi, pineapple, strawberries, raspberries, watermelon

**Vegetables:** asparagus, broccoli, cabbage, cauliflower, kale, peppers, sweet potatoes, tomatoes, romaine lettuce, spinach, and mustard greens.

## Vitamin A

Vitamin A, a fat soluble vitamin, is important for the formation and maintenance of healthy skin, hair, and mucous membranes. Vitamin A helps people see in dim light.

Food sources of vitamin A include:

**Fruits:** cantaloupe, mandarin oranges, mangos, nectarines, peaches, plums

**Vegetables:** broccoli, carrots, greens, kale, pumpkin, spinach, winter squash, sweet potatoes, tomatoes, snow peas

**Meat/Meat Alternates:** liver, whole eggs, low-fat yogurt

**Milk:** fluid low-fat or fat-free milk



## Vitamin E

Vitamin E, a fat soluble vitamin, is an antioxidant. It stabilizes cell membranes and regulates oxidation reactions.

According to the Institute of Medicine (2000), most Americans consume enough vitamin E to meet recommendations because it is abundant in foods. The best sources of vitamin E are vegetable oils--for example, soybean, corn, cottonseed, and safflower. That includes margarine, salad dressing, and other foods made from oil. Nuts (especially almonds and hazelnuts), seeds (especially sunflower seeds), and wheat germ. All of these are high in oil. Green, leafy vegetables provide smaller amounts.





## Folate

Folate, a water soluble B vitamin, helps the body form red blood cells and aids in the formation of genetic material in cells.

Food sources of folate include:

**Meat/Meat Alternates:** black-eyed peas, lentils, liver, red kidney beans

**Vegetables:** leafy green vegetables such as spinach and mustard greens, romaine lettuce, green peas

**Grains/Breads:** whole grain bread products, fortified ready-to-eat cereals

**Fruits:** oranges, orange juice, tangerines, melons, plums, raspberries, strawberries

## B Vitamins

Other B vitamins include: thiamin, riboflavin, niacin, vitamin B<sub>6</sub> and Vitamin B<sub>12</sub>. These B vitamins have important roles in converting food to energy for the body during metabolism.

Vitamin B<sub>12</sub> is found only in animal-based foods or Vitamin B<sub>12</sub> fortified foods. Food sources of B vitamins include:

**Grains/Breads:** Enriched and fortified bread and cereal products are good sources for thiamin, riboflavin and niacin.

**Meat/Meat Alternates:** Lean pork products, dry beans and peas are good sources for thiamin; liver contains riboflavin; and poultry and fish are good sources for niacin.

**Milk:** Fluid low-fat or fat-free milk is a good source of riboflavin.

What's in a Meal?

## Foods Higher in Fat, Salt and Sugar

The *Dietary Guidelines for Americans* recommend choosing a diet that is moderate in total fat, salt and sugar. Following are some common foods that may be higher in fat, sugar and/or salt. These foods should be served occasionally.

### Foods that are higher in fat:

cream soups	granola bars
full fat cheese	organ meats
pie crust	snack crackers
croissants	salad dressing
Danish rolls	processed meats
bacon/sausage	butter/margarine
cakes/cookies	lard/shortening
cheese	fried foods
ice cream	whole milk

### Foods that are higher in salt:

pickles	barbecue sauce
relish	canned soups
bouillon	canned vegetables
catsup	processed cheese
salted nuts	meat tenderizer
soy sauce	luncheon meats
mustard	cured meats
salted pretzels	salad dressing
steak sauce	potato/tortilla chips

### Foods that are higher in sugar:

soft drinks	fruitades/fruit punch
cakes	pre-sweetened cereals
pastries	cookies and bars
granola bars	toaster pastries
sweet rolls	flavored milk
doughnuts	pie filling
candy	dairy desserts



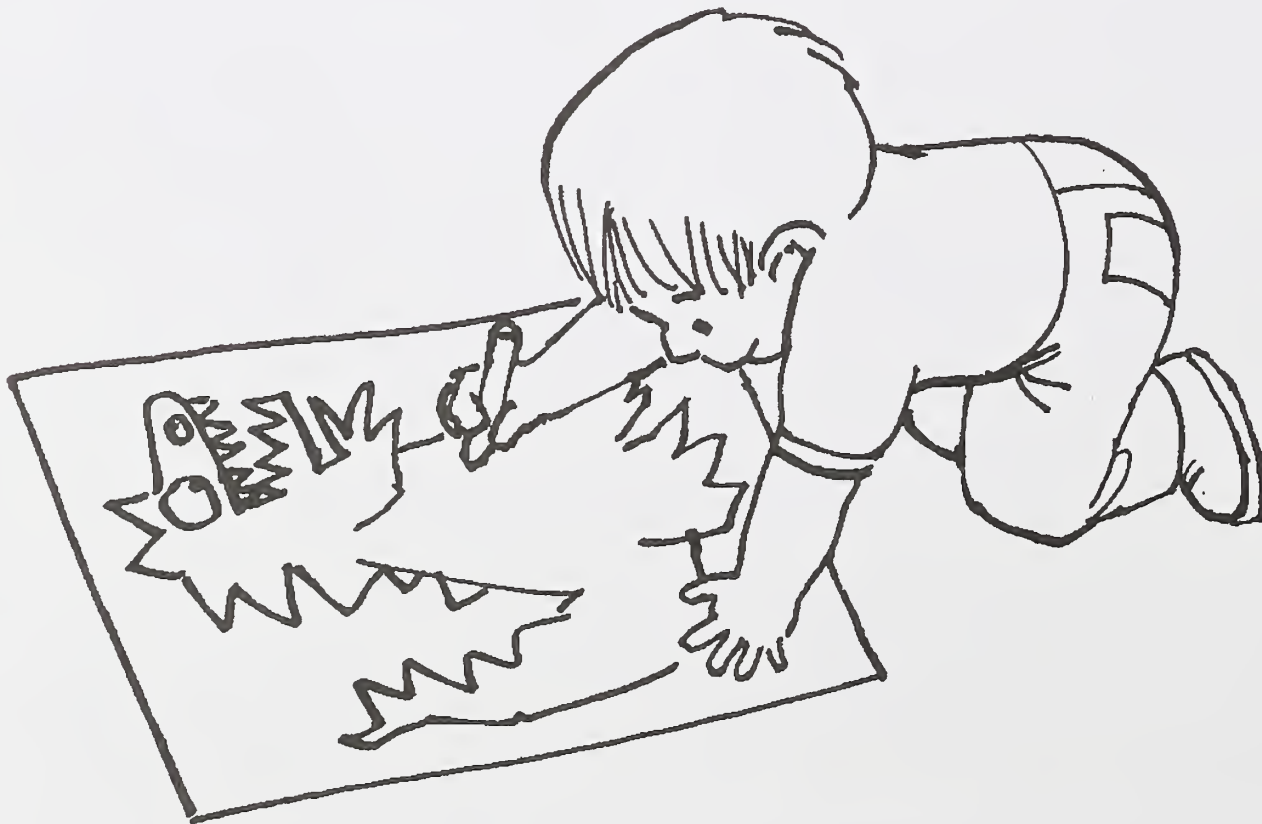
## Sample Menus

Planning menus means more than just thinking of foods that taste good together. The nutritive value of foods must be considered.

On the next page is a sample of menus for five days including breakfast, morning snack, lunch, afternoon snack and supper. These menus follow the *Dietary Guidelines* and meet the Child and Adult Care Food Program meal pattern requirements for children 3-5 years old. Meal pattern requirements are listed in "Crediting Foods."

The *Dietary Guidelines* apply to the diet over several days, not to a single meal or food. An occasional high-fat, sugary or salty food can fit into a diet if balanced with other low-fat, low-sugar or low-salt foods. Therefore, many meals must be included when determining if the *Dietary Guidelines* are being followed.

Computer programs that analyze the nutritional values of meals are available if you would like to evaluate menus. Using one of these computer programs, a nutrient analysis of the sample weekly menu shows that no more than 30% of calories comes from fat and less than 10% of calories comes from saturated fat.







### Sample Menus for Children (ages 3-5)

Requirements	1st Day	2nd Day	3rd Day	4th Day	5th Day
<b>Breakfast</b> grains/breads (including cereal juice or fruit or vegetable milk, fluid	oatmeal (1/4 c) with sugar (1 tsp or less) orange juice (1/2 c) low-fat milk (3/4 c)	waffle (0.6 oz) fresh peach slices (1/2 c) low-fat milk (3/4 c)	raisin bran cereal (1/3 c) grapefruit juice (1/2 c) *whole wheat toast (1/2 slice) low-fat milk (3/4 c)	coffee cake (1.3 oz) melon balls (1/2 c) low-fat milk (3/4 c)	whole wheat toast (1/2 slice) *scrambled egg (1/4 c) mixed fresh fruit (1/2 c) low-fat milk (3/4 c)
<b>AM Snack</b> (select 2 of 4) milk, fluid juice or fruit or vegetable grains/breads meat or meat alternate	fresh nectarines (1/2 c) cinnamon-raisin toast (1/2 slice) water (1/2 c)	bran muffin (1 oz) low-fat milk (3/4 c)	grape juice (1/2 c) English muffin (1/2 muffin) *1 tsp margarine *1 tsp jelly	yogurt (1/2 c) peaches (1/2 c) water (1/2 c)	apple juice (1/2 c) banana nut muffin (1 oz)
<b>Lunch</b> meat or meat alternate vegetables and/or fruits (2 or more) grains/breads milk, fluid	turkey (1 oz) and Swiss cheese (0.5 oz) on whole wheat bread (1 slice) *thin slice tomato *1/4 leaf lettuce oven baked fries (1/4 c) strawberries (1/4 c) low-fat milk (3/4 c)	ground beef chili with beans (1.5 oz beef and beans, 1/4 c tomato) *rice (1/4 c or less) cornbread (1 slice) pear halves (1/4 c) low-fat milk (3/4 c)	grilled chicken (1.5 oz) whole wheat bun (0.5 oz) peas (1/4 c) applesauce (1/4 c) low-fat milk (3/4 c)	tuna salad (1.5 oz tuna) whole wheat bread (1 slice) coleslaw (1/4 c) blueberries (1/4 c) low-fat milk (3/4 c)	hamburger (1 oz beef) with cheese (0.5 oz) whole wheat bun (0.5 oz) *1/4 lettuce leaf *thin slice tomato green beans (1/4 c) canned pears (1/4 c) low-fat milk (3/4 c)
<b>PM Snack</b> (select 2 or 4) milk, fluid juice or fruit or vegetable grains/breads meat or meat alternate	*apple sections (2-3) granola cookie (1 oz) low-fat milk (3/4 c)	banana (1/2 c) graham crackers (2 squares) water (1/2 c)	orange sections (1/2 c) bagel (1/2 bagel) water (1/2 c)	broccoli/ cauliflower (1/2 c) *low-fat vegetable dip (1 Tbsp or less) saltine crackers (4 crackers)	applesauce (1/2 c) melba toast (0.4 oz) water (1/2 c)
<b>Supper</b> meat or meat alternate vegetables and/or fruits (2 or more) grains/breads milk, fluid	spaghetti (1/4c) meat balls (1.5 oz beef) tomato sauce (1/4 c) *grated Parmesan cheese (1 tsp) green beans (1/4 c) Italian bread (0.5oz) *1 tsp margarine low-fat milk (3/4 c)	baked chicken (1.5 oz) cooked broccoli (1/4 c) mashed potatoes (1/4 c) whole wheat roll (0.5 oz) *1 tsp margarine low-fat milk (3/4 c)	breaded fish fillet (1.5 oz fish) cooked carrots (1/4 c) boiled potato (1/4 c) cracked wheat roll (0.5 oz) low-fat milk (3/4 c)	chicken tacos (1 oz chicken and 0.5 oz cheese) lettuce & tomatoes (1/4 c) taco shell (0.5 oz) corn (1/4 c) fruit cocktail (1/4 c) low-fat milk (3/4 c)	roast pork (1.5 oz) corn (1/4 c) mixed greens (1/4 c) with 1 Tbsp buttermilk dressing whole wheat roll (0.5 oz) low-fat milk (3/4 c)

\*Food items served in addition to the required components of the CACFP meal pattern to increase variety, appeal, nutrient content and calories.



## Vegetarian Diets

Vegetarian diets omit meat or all animal products.

There are many different types of vegetarian diets.

- **vegan** (pure vegetarian): will not eat any foods of animal origin
- **lacto-vegetarian**: will consume milk, yogurt and cheese products but will not consume other animal foods
- **lacto-ovo-vegetarian**: will consume milk, milk products and eggs, but not meat
- **pesco-vegetarian**: will consume milk, yogurt, cheese products, eggs and fish, but not any other animal foods

If These Foods Are Excluded	These Are Limited	Include These Foods If Possible*
Meat, fish, poultry	Protein, iron, energy, zinc, folate, vitamin B <sub>12</sub> , thiamin, essential fatty acids	Milk, dairy products, grains, legumes
Milk, dairy products	Protein, energy, calcium, vitamin B <sub>12</sub> , vitamin D, riboflavin	Legumes, soy-milk (fortified)**, dark green vegetables

\* There are no perfect substitutes for animal foods. Because nutrients may be lacking in diets where meat is not consumed, these foods are recommended to replace some of the nutrients.

\*\* Use of soy milk in the CACFP requires a statement signed by a medical authority.

Whenever food choices are limited, it is more difficult to meet the body's needs for energy and essential nutrients.

Vegetarian diets specifically may lack

calories, protein, essential fatty acids, calcium, iron, zinc, riboflavin, vitamin B<sub>12</sub> or vitamin D. A child's growth and development may be stunted when food energy is less than needed.

Vegetarian diets may be accommodated within the Child and Adult Care Food Program meal pattern. For example, dry beans can be served in place of meat. A registered dietitian, sponsor or State agency can provide more information on feeding children who are vegetarians.



## Dental Health

Nutrition plays an important role in the development of healthy teeth. To promote dental health:

- Eat foods rich in calcium and phosphorus.
- Choose beverages and food to moderate your intake of sugars.
- Eat a variety of firm, fibrous foods to stimulate the release of saliva.
- Brush teeth or rinse mouth thoroughly with water after eating.
- Brush and floss teeth daily.





## Physical Activity

Physical activity is important for maintaining good health. It burns calories, aids in weight control and helps prevent some chronic diseases. Strength, flexibility, and heart and lung fitness can be improved by participating in physical activities.

There are many types of exercise that children enjoy. Because younger children may not have skills needed for organized sports, active games are usually the best form of exercise. Younger children love to dance or play games such as "tag," "follow the leader," "catch" or "duck, duck, goose."

Older children have better developed motor skills. They can participate in many activities including cycling, skating, swimming or team sports.

Try to encourage all children to exercise and participate in a variety of activities. Aim to accumulate at least 30 minutes (adults) or 60 minutes (children) of moderate physical activity most days of the week, preferably daily. Success in physical activities and being part of a group can help build a child's self-esteem while maintaining good health.



## Drug and Nutrient Interaction

Medications should be taken only as prescribed by a child's physician. Some medications may affect the body's use of foods. Other times, foods may interfere with a medicine's effectiveness in the body.

If a child is taking medication, ask the parent to provide information or ask a registered pharmacist at a hospital or local drug store about restrictions.

## Children with Special Nutrition Needs



*Child care personnel should never diagnose health conditions; prescribe nutritional requirements; nor revise, change or interpret diet statements.*

*More information than that provided here will be needed to care for children with special needs.*

## Overweight and Underweight Children

It is important that growing children have healthy diets. Children must eat enough food to allow for adequate height and weight gain.

The diets of children who are overweight or underweight may need careful planning and monitoring. Foods, and the amounts served, must be selected wisely. Physical activity is an important component in maintaining proper weight.



## Overweight Children

Overweight children should not be put on strict weight-loss diets. Children should be fed enough food to maintain a constant weight. By doing this, children can safely “grow out” of their overweight condition.

Diets that are too restrictive may be harmful to children. However, it is a good practice to limit the consumption of snack foods that are high in calories, fat and/or sugar, such as potato chips or cookies. Fruits or vegetables are healthier choices for snacks.

Special weight-loss diets for children who are overweight should only be prescribed by a physician or other medical authority.

## Underweight Children

Many children are underweight for a short period of their childhood when they are “sprouting up.” With time, their weight will catch up to their height.

Underweight children can safely gain weight, while staying physically active, by increasing caloric intake. Rather than increasing high-fat, high sugar foods, add nutrient dense foods to the diet to increase calories.

## Food Allergies and Food Intolerances

A food allergy is usually caused by the body’s immune system not reacting to a food or food additive appropriately. Symptoms include: wheezing, runny nose, bronchitis, vomiting, diarrhea, rashes, itching and headaches. Food intolerances

cause the body to react to a food but do not involve the immune system.

Food allergies are most common in infants, due to their immature digestive systems. Infant food allergies are usually outgrown during a child’s preschool years.

Foods which cause allergic reactions can be eliminated from the diet. However, it is important that the diet still contain a variety of foods for healthy growth and development. The most common food allergies in children are milk, egg, soy, peanuts, nuts, shellfish, and wheat.

Information about food allergies and food intolerances should be provided by the child’s parent(s) and supported by a physician’s statement.

Children may be sensitive to the following foods or ingredients:

- **flour and baked products:** The consumption of flour and baked products must be carefully watched in persons who are gluten intolerant (Celiac disease). Gluten is a protein found in wheat, oats, rye and barley.
- **tartrazine (food color, Yellow Number 5):** An allergic reaction may result from the consumption of foods such as orange drinks, dry mix macaroni and cheese, and salad dressing that contain tartrazine.
- **sulfites:** Individuals with asthma may be sensitive to sulfites. Sulfites are often added to dried fruit and vegetables.





- **lactose:** Lactose, commonly referred to as “milk sugar,” is found in milk and milk products containing milk or milk solids. Persons with lactose intolerance lack the enzyme needed for the digestion of lactose. Some non-dairy foods may include ingredients that contain lactose. Look for the words lactose, whey, nonfat milk solids, and sweet or sour cream. Some baked and processed foods may contain lactose. African-Americans, Native Americans and Asians are particularly susceptible to lactose intolerance.
- **casein:** Some individuals may be sensitive to casein, a milk protein. In addition to milk, casein may be found in canned tuna, non-dairy creamers and baked goods such as crackers. Look for the words lactose, whey, nonfat milk solids, and sweet or sour cream.
- **peanuts and tree nuts:** Nuts may cause severe reactions in individuals allergic to them. It is important to read labels carefully.

## Diabetes

Special diets may be prescribed by a physician for persons who are diagnosed with diabetes. Diabetes is a disorder in which the body is unable to produce or respond to insulin. There are two forms.

Children may suffer from Type I or insulin dependent diabetes mellitus. This requires insulin injections. Nutrition plays an important role in the control of Type I diabetes.

The second form of diabetes, Type II or non-insulin dependent diabetes, is common in adults. However, increasing numbers of children are being diagnosed with this form of diabetes because of the increased number of overweight children. Overweight is the major nutritional risk for developing this disease.

## Iron Deficiency

Iron deficiency is most common in inner cities and rural areas. Individuals with iron deficiency may appear to be tired, unmotivated and apathetic. Iron deficiency may be caused by an inadequate intake of iron, poor absorption of iron or severe blood loss.

Some sources of iron include fortified bread and cereals, meat, dry beans and dark green leafy vegetables. Iron absorption increases when a good source of vitamin C is eaten at the same time as an iron-rich food. A high fiber intake, tea, coffee and some antacids can decrease iron absorption.





## Children With Oral Motor Problems

Children with oral motor problems may need special equipment and/or assistance with eating. Food texture often will need to be modified. Physicians or other medical authorities will be able to provide guidance about obtaining special equipment and preparing special foods.

## Developmental Disabilities

A child with developmental disabilities may or may not be able to eat foods recommended for his or her age group. Foods appropriate for younger children may be required or textures of foods may need to be modified. The child may need assistance with eating and may require longer meal service times so that an adequate amount of food is eaten. Some children with developmental disabilities may need to be tube fed.

## Inherited Metabolic Disorders

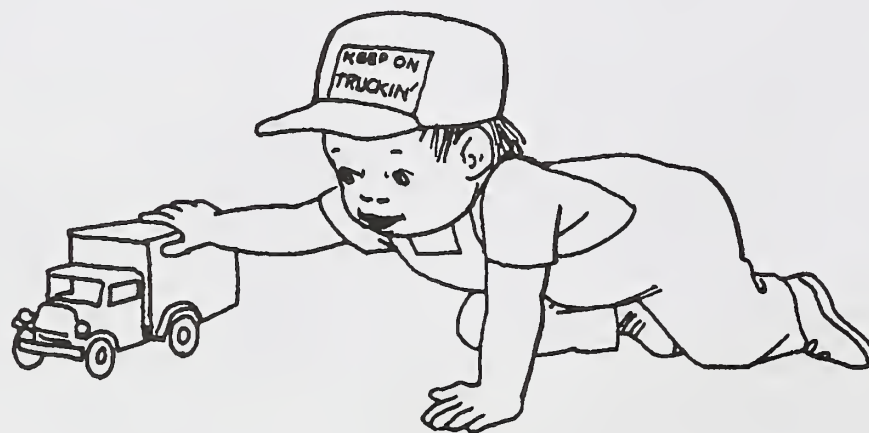
Inherited metabolic conditions include phenylketonuria (PKU), maple syrup urine disease, homocystinuria and galactosemia. Physicians will prescribe special diets for children who have these conditions.

Children with PKU are unable to digest the amino acid, phenylalanine. Phenylalanine is found in high protein foods and foods that contain the non-caloric sweetener aspartame (NutraSweet).

Children with maple syrup urine disease or homocystinuria will have diets prescribed that limit certain amino acids.

Children who suffer from galactosemia cannot digest galactose, which is found in milk products. Milk, milk products and other foods that contain galactose should be eliminated from the diet.

*A child whose disability restricts his or her diet shall be provided food substitutions only when supported by a statement signed by a licensed physician. The supporting statement shall identify: the individual's disability and an explanation as to why the disability restricts the child's diet; the major life activity affected by the disability; the food or foods to be omitted from the child's diet; and the food or choice of foods that must be substituted. Such meals or snacks shall be claimed at the same reimbursement rate as meals/snacks which meet the meal pattern. The services of a registered dietitian should be utilized to assist in implementing the physician's prescription.*







## Formation of Eating Habits

Eating habits are formed during the early childhood years and last a lifetime. Good eating habits do not just happen; they must be learned. Presenting children with nutritious foods and limiting their access to “empty calorie” foods can help children learn to make nutritionally sound food choices.

It is important that mealtime be a happy time. Pleasant eating experiences can lead to positive attitudes about food and eating.

- Try to understand each child's personality and reaction to foods.
- Encourage children to do as much as possible for themselves. First efforts are an important step toward growth.



Children may be in no hurry to eat once the first edge is taken off their hunger. Urging children to “hurry up” may spoil their pleasure of eating.

### Introducing New Foods

- Introduce only one new food at a time. Offer a very small amount of the new food at first, so that a child learns new flavors and textures. It is best to offer a new food at the beginning of the meal when children are hungry. Also, allow children plenty of time to look at and examine foods.
- Do not introduce a new food to a child who does not feel well or is irritable.

- If you offer a new food and children turn it down, do not make a fuss. Offer the food again a few days later.
- If children accept a new food, let them try it again soon so they become accustomed to it.

### Encouraging Favorable Food Attitudes and Good Eating Habits

- Serve meals in a bright and attractive room.
- Use tables, chairs, dishes, glasses, silverware and serving utensils that suit young children.
- Provide a quiet time just before meals so that the atmosphere can be friendly and relaxed at mealtime.
- Encourage children to help by setting the table, bringing food to the table or clearing and cleaning the table after eating.
- Select and arrange food on plates to make meals interesting and attractive. Include a variety of colors, flavors, textures, shapes and temperatures.
- Do not encourage the “clean plate” ideal. Children may learn to overeat if they are told to finish their meals or clean their plates too often.
- Do not allow children to use food to gain attention.
- Do not use food as a reward and punishment (Do not ask children to eat vegetables so they can have dessert).
- Do not withhold food for punishment.



## Nutrition Education

Teaching nutrition and healthy food practices is most effective when it is part of other learning experiences. Learning is reinforced when children have an opportunity to practice or visualize what is taught.

Here are some nutrition activities that children can do:

- Squeeze oranges and drink the juice for snacks. Roll the oranges on a hard surface, such as a table or counter before juicing.
- Mix a variety of fruits together to make a salad for lunch.
- Grow a potato in water to show how the plant grows from the stored food in the potato.
- Celebrate special occasions like Halloween by baking pumpkin muffins or Washington's birthday by preparing a cherry cobbler.
- Freeze juice in small paper cups to make "juice-sicles." Changes in texture, volume and consistency can be observed.

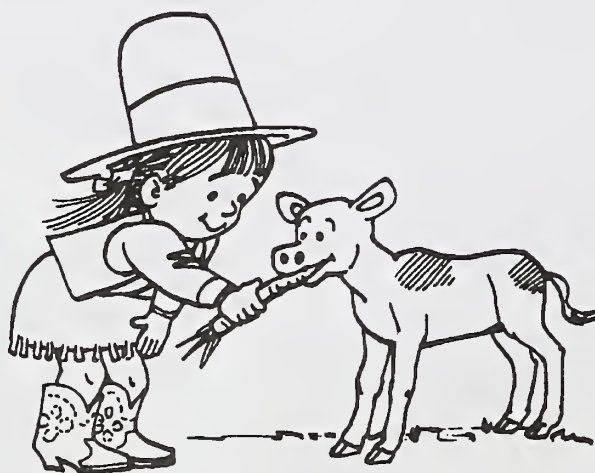
- Role-play in a supermarket setting. This could include selecting foods, putting foods in food groups and exchanging money tokens.

Children can learn about many cultural groups by sharing favorite family menus, recipes, special foods and traditions of their ethnic heritage.

- Children can share holiday traditions and special foods.
- Feature foods from different cultures throughout the year.

Children can learn many things from trips to farms, grocery stores, dairies, bakeries or food companies.

- On a trip to a farm, children can observe cows being milked and learn how milk gets from the farm to the container.
- At a bakery, children can learn how bread is made.







## Questions and Answers

Q1. Due to its high fat and cholesterol content, should cheese be served to children?

A1. Cheese is a good source of protein, calcium and riboflavin. If cheese is served frequently, use low-fat cheese. Examples of low-fat cheeses include: mozzarella and ricotta made from part-skim milk, farmer cheese, feta and low-fat or reduced-fat American or cheddar. These usually contain 5 or 6 grams of fat per ounce. Low-fat cottage cheese made from 2% or 1% milk fat can also be served.

Q2. What is the difference between ice cream and frozen yogurt?

A2. Frozen yogurt is typically lower in fat and higher in protein than ice cream. Ice cream contains 10-18% fat or more by weight. Because there is no standard of identity for frozen yogurt, frozen yogurt can be found with varying levels of fat, sugar and other ingredients. Low-fat ice cream is another alternative to regular ice cream. Frozen yogurt and low fat ice cream are not necessarily lower in calories than regular ice cream. These frozen dairy products do not contribute toward any component of the Child and Adult Care Food Program meal pattern.

Q3. What is the difference between butter and margarine?

A3. Both margarine and butter get 100% of their calories from fat.

Butter is a fat made from milk. Margarine is made from vegetable oil. Hydrogenation is the process of making it solid. Margarine may be liquid, soft or stick and has variation in the level of saturated, monosaturated, polyunsaturated and trans fatty acids. Both butter and margarine supply the same number of calories per serving.

Q4. What types of desserts should be offered? How often should desserts be served?

A4. Only certain types of desserts are creditable in the Child and Adult Care Food Program. Fruits can be served as often as desired for dessert. Grain-based desserts such as cakes and cookies are not creditable in the CACFP as a dessert at lunch or supper. However, grain-based desserts may be served as a component for snacks. It is recommended that cookies and other baked products be served for snacks no more than two times per week.

Some desserts are high in sugar, fat and saturated fat, and should be served occasionally. For more information on the types of baked products that may be credited, refer to the section, "Crediting Foods."

Q5. How many calories are needed for a child?

A5. The average daily caloric need of children 4-6 years of age is 1600 calories, children 2-3 years old need about 1300 calories. A healthy diet including a variety of foods should provide sufficient calories.





Q6. How often can eggs be served to children?

A6. Avoid eggs in the first year of life because of the potential to create an allergy. It is recommended that egg yolks and whole eggs be served to children over one year of age occasionally. This includes eggs served plain and those used in baked or cooked products.

Q7. Can I serve chocolate milk to children?

A7. Chocolate milk may be served to children. If possible, try to serve low-fat varieties to children age two and older.

Q8. Can I serve water as the beverage at snack time?

A8. Yes, water can and should be offered as a beverage in addition to the required two snack components. Children need to be offered water throughout the day.

Q9. What are some healthy food choices that can be served when celebrating birthdays and other special occasions?

A9. Creditable foods, such as muffins, graham crackers, or quick breads, can be served as healthier alternatives to traditional goodies when celebrating special days.

Q10. Are there good and bad foods?

A10. Foods should not be identified as good or bad foods. The nutritional quality of a diet is not defined by any single food, but rather by the variety and quantity of food eaten during each day.

Q11. What advice can be provided to parents who request a vegetarian diet for children?

A11. Parents should be cautioned that unless the vegetarian diet is carefully planned, essential nutrients may not be supplied in quantities necessary to support growth and development. More detailed information on vegetarian diets is provided earlier in this section.









# Modifying Recipes and Menus to Meet the Dietary Guidelines for Americans

By carefully purchasing foods, preparing foods in different ways or substituting ingredients, diets can be made healthier. On the following pages, suggestions for reducing the fat, salt and sugar, and increasing the amount of fiber in recipes are provided. Fats, salt and sugar are important elements of healthy diets when consumed in moderation.

When purchasing foods, compare the ingredient lists and nutrition panels on the labels of several brands of a food product. Select the brand that contains the least amount of fat, salt and sugar, and the greatest amount of fiber.

When modifying recipes, it is best to make one modification in a recipe at a time. Reduce or increase the amount of the ingredient to be modified by a small amount at first. Try additional modifications in the recipe later.

Baked products require more careful adjustments than casseroles or soups. For example, drastically reducing the amount of sugar in a cake or the fat in biscuits may result in unsatisfactory products. A reduction in fat or sugar may require a slight increase in the amount of liquid used.

Every ingredient has an important role in the production of a satisfactory final product.

- Fat

Fat provides flavor and richness, improves texture and tenderness in baked goods, promotes flakiness and lightness in baked goods, and makes foods smooth and creamy.

- Eggs

Eggs provide structure, act as thickeners and emulsifiers (help mix fat and water), and add volume to foods when beaten.

- Sugar

Sugar provides flavor, increases tenderness and browning in baked goods, acts as a preservative in jams, jellies and pickles, and helps yeast products rise.

- Salt

Salt provides flavor, slows or reduces the action of yeast in yeast breads, and acts as a preservative in canned goods and some dried foods.





## Suggestions for Reducing Fat

- Use reduced fat (2%), low-fat (1%) or fat-free milk rather than whole milk.
- Replace sour cream with low-fat sour cream or low-fat yogurt. Add one tablespoon of cornstarch to every one cup of yogurt to prevent separation when heating. A recipe for a "sour cream substitute" is provided on the following page.
- Blend mayonnaise with low-fat cottage cheese for a low-fat mayonnaise substitute or purchase commercial low-fat or fat-free mayonnaise.
- Purchase water-packed tuna rather than oil-packed tuna.
- Use low-fat varieties of cheese such as part-skim mozzarella, farmer cheese, muenster, provolone or reduced-fat cheddar or American cheese.
- Choose ground beef that is at least 80% lean (less than 20% fat).
- Substitute lean ground turkey for all or part of ground beef in recipes.
- Remove skin from poultry and trim off fat.
- Chill soups, gravies and stews. Skim off hardened fat before reheating to serve.
- Trim off all visible fat from meats.
- Drain all fat from cooked meats.
- Serve meat and potatoes without gravy.
- Use spices, herbs and/or lemon juice rather than butter or margarine on vegetables.
- Substitute two egg whites for each whole egg in most muffin, cookie or pudding recipes.
- Limit the use of condensed soups. Try the recipe for low-fat condensed soup substitute on the next page.
- Use buttermilk, milk or egg white instead of whole egg to bind breading on chicken.
- Use half the specified amount of oil to saute or brown foods.
- Substitute applesauce for one-half of the butter or margarine in cookies or cakes.
- Use no more than one egg per one cup of flour in pancakes.
- Bake, broil or roast meat rather than frying.
- Replace frankfurters, bologna or other processed meat with lean meat, poultry or fish.
- Limit the use of pan-fried or deep-fat-fried foods.
- Limit the use of high-fat crackers and breads such as croissants and some muffins and specialty breads.
- Garnish fish with lemon juice rather than tartar sauce or purchase low fat tartar sauce.





Adults and children need fat in  
their diets every day.

## Low-fat Condensed Soup Substitute

1 tablespoon butter or margarine  
2 tablespoons flour  
1 cup skim milk  
1/4 teaspoon salt (optional)  
1/4 cup chopped celery, sliced cooked  
mushrooms, or cooked chicken (optional)

1. Melt margarine. Stir in flour.
2. Add milk gradually.
3. Stir over low heat until thick
4. Add one or more of the optional ingredients, if desired.

This recipe replaces one can of condensed soup.

## Sour Cream Substitute

1 cup low-fat cottage cheese  
1 tablespoon fresh lemon juice

1. Combine cottage cheese and lemon juice.
2. Whirl in a blender or beat until smooth.

This recipe makes one cup of sour cream substitute.

## Suggestions for Reducing Sodium

- Omit or reduce by one-half the amount of table salt in most recipes.
- Include a variety of spices, seasonings, herbs and vegetables in recipes rather than table salt. For example, try chives, dill, garlic or vinegar on cucumbers; serve green beans with lemon juice or sauteed onions; top potatoes with parsley; try bay leaf, fresh mushrooms, onion or thyme on beef; season poultry with lemon juice, marjoram, fresh mushrooms, paprika, parsley, sage or thyme; or season fish with bay leaf, curry powder, lemon juice, fresh mushrooms or paprika.
- Try the three low-sodium seasoning blend recipes included on the following page.
- Decrease the use of celery salt, seasoned salt, soy sauce, monosodium glutamate (MSG), Worcestershire sauce or bouillon cubes.
- Use garlic or onion powder in place of garlic or onion salt.
- Make soup stock from turkey, chicken or beef bones, limiting the amount of bouillon base added.
- Use fresh or frozen foods rather than canned foods or use low salt or low sodium canned foods.
- Serve processed meats only occasionally.





### Seasoning Blend #1

*a low-sodium "all-purpose" seasoning for meats, vegetables and tomato-based foods*

2 tablespoons dry mustard  
2 tablespoons onion powder  
2 tablespoons paprika  
2-3 teaspoons black or white pepper  
2 teaspoons thyme  
1/2 teaspoon ground basil

Blend spices thoroughly. Store extra seasoning in tightly covered glass bottle.

Yield: approximately 1/2 cup seasoning

### Seasoning Blend #2



*an "all-purpose" seasoning to pep up chicken, hamburger and tomato-based dishes*

4 tablespoons onion powder  
4 tablespoons parsley flakes, crushed  
1/4 teaspoon garlic powder (optional)  
2 tablespoons paprika  
1 tablespoon ground basil

Blend spices thoroughly. Store extra seasoning in tightly covered glass bottle.

Yield: approximately 3/4 cup seasoning

### Seasoning Blend #3

*a low-sodium seasoning for pasta sauces or Italian dishes*

4 tablespoons dried parsley, crushed  
4 teaspoons dried minced onion  
1 teaspoon ground oregano  
2 teaspoons dried basil, crushed  
1 teaspoon ground thyme or marjoram  
2 teaspoons celery seed  
1/4 teaspoon garlic powder  
1/4 teaspoon black pepper

Blend spices thoroughly. Store extra seasoning in tightly covered glass bottle.

Yield: approximately 1/2 cup seasoning



## Suggestions for Reducing Sugar

- Use up to 1/3 less sugar in traditional recipes for cookies, muffins, quick breads and pie fillings. This includes sugar, brown sugar, corn syrup, honey and molasses.
- Replace canned fruits packed in heavy syrup with fresh fruits or with canned fruits packed in natural juices or water.
- Limit the use of jams, jellies or flavored gelatins.
- Serve quick breads rather than high-sugar cakes or cookies. Try low fat banana, carrot, cranberry, pumpkin or zucchini bread.
- Serve seasonal fresh fruits for dessert rather than cakes, cookies or pies.



## Suggestions for Increasing Fiber

- Substitute whole wheat flour for up to one-half of the all-purpose flour in your favorite bread recipes.
- Substitute beans (kidney, pinto or black beans) for up to one-half of the meat in entrees such as chili or tacos.
- Prepare potatoes with skins, rather than peeled. Encourage the consumption of potato skins, which are high in fiber.
- Add fruits such as chopped apples with skin, raisins or chopped prunes to oatmeal, cookies, cakes and breads.
- Use oatmeal rather than white bread crumbs as an extender in meatloaf or meatballs.
- Serve raw vegetables such as broccoli, cauliflower, carrots and celery for snacks.
- Top cereals with fresh or frozen fruits such as blueberries, bananas or peaches.





## Menu Modification

A healthful diet offers a variety of foods, is low in fat, saturated fat and cholesterol, and contains salt and sugar in moderation. Following is an example of how a lunch or supper menu can be made more healthful with simple modifications.

MENU	CALORIES	FAT (GRAMS)
Chicken nuggets (1.5 oz meat equivalent) with BBQ sauce	226 50	15 —
Fried french fries (1/4 cup) with tomato catsup	45 18	2 —
Italian bread (1 slice) with margarine (1 tsp)	73 34	1 4
Peaches in heavy syrup (1/4 cup fruit)	47	—
Whole milk (3/4 cup)	112	6
Total	605***	28 (42% fat)

MENU MAKE-OVER	CALORIES	FAT (GRAMS)
Chicken breast strips, baked (1.5 oz meat equivalent) with 1 tablespoon BBQ sauce	171 24	9 0.1
Salad (lettuce, carrot, tomato, cucumber with mandarin oranges and raisins) 3/8 cup	45	0.1
Whole wheat bread(1 slice) with margarine (1 tsp)	69 34	1 4
Peaches in light syrup* (3/8 cup fruit)	51	—
reduced fat (2%) chocolate milk**(1 cup)	179	5
Total	552***	16.5 (27% fat)

\*peaches in light syrup are lower in sugar than peaches in heavy syrup

\*\*reduced fat (2%) chocolate milk is lower in fat than whole milk

\*\*\*1/3 of the Recommended Dietary Allowance for children age 3-5 is 544 calories







Nutrition Facts	
Serving Size 1/2 Cup (125g)	
Amount Per Serving	
Calories 10	Calories from Fat 5
% Daily Value*	
Total Fat 1g	2%
Sodium 1g	20%
Total Crap 1g	100%
*Percent Daily Values are based on a diet of other people's secrets.	

# Understanding Food Labels: What's in a Food?

## Overview of Food Labeling

Modern American supermarkets are different from food markets in most other countries around the world. Foods are in boxes, bottles, jars and other packages. Food labels are present on most packaged food products. Labels help consumers better understand how to make informed decisions about the foods they eat.

The U.S. Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) and the U.S. Department of Health and Human Services' (DHHS) Food and Drug Administration (FDA) are responsible for assuring that food labels contain truthful and accurate information. The FSIS has authority over all products containing more than 3 percent fresh meat or at least 2 percent cooked poultry. The FDA oversees the labeling of most other food products.

According to law, every food label must include:

- the common name of the product
- the name and address of the manufacturer, packer or distributor

- the net contents in terms of weight, measure or count
- the ingredients, in order of predominance by weight from greatest to least
- nutrition information
- serving size

## The Nutrition Labeling and Education Act

Under the Nutrition Labeling and Education Act (NLEA) of 1990, the format and content of food labels were improved to provide more complete, useful and accurate nutrition information.

In addition, FDA encouraged retailers to voluntarily provide nutrition information for fresh fruits, vegetables and fish. This nutrition information is to be provided in the store close to where these foods are displayed for sale. Nutrition information may be on signs, posters, brochures, notebooks or leaflets, video, live demonstration, or may be on the individual food package.





Nutrition Facts	
Amount Per Serving	
Calories 10	Calories from Fat 5
Total Fat 2g	4%
Sodium 20mg	4%
Total Cholesterol 10mg	20%
Total Fiber 1g	2%
Total Protein 1g	2%
Percent Daily Values are based on a diet of other people's secrets.	

## Understanding Food Labels: What's in a Food?

### Key Requirements in Food Labeling Under the Nutrition Labeling and Education Act

The Nutrition Labeling and Education Act of 1990 requires:

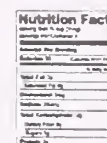
- Nutrition labeling for almost all foods.
- Information on the amount per serving of saturated fat, cholesterol, dietary fiber and other nutrients that are of major health concern.
- Nutrient reference values (percent of daily values) to show how a food fits into an overall daily meal plan.
- Standardized serving sizes based on the amounts customarily consumed for products to make nutritional comparison of similar products easier.
- Nutrition information for non-labeled products near their point-of-purchase. Twenty of the most popular types of raw seafood, fruits and vegetables, and meat and poultry may have nutrition information provided near their display in grocery stores or on the package.
- Declaration of the total percentage of juice in juice drinks.

- Uniform definitions for terms that describe a food's nutrient content. Terms such as "low-fat," "high-fiber," "free," "low," "light" and others are defined. A chart providing definitions of nutrient content descriptors is on the following page.

In addition, the NLEA allows:

- Specific health claims about the relationship between nutrients and diseases such as: (1) calcium and osteoporosis, (2) fat and cancer, (3) sodium and hypertension, (4) saturated fat and cholesterol and coronary heart disease, (5) fiber-containing grain products, fruits and vegetables and cancer, (6) fruits, vegetables and grain products that contain fiber and coronary heart disease, (7) fruits and vegetables and cancer, (8) folic acid and neural tube defects, (9) sugar alcohols and dental caries, and (10) soluble fiber from whole oats and coronary heart disease.





## Nutrient and Food Descriptors and Their Definitions

Description	Definition
Free	The reference amount used on the food label contains none or a very small amount: less than 5 calories; less than 5 mg sodium; less than 0.5 g total fat and saturated fat; less than 2 mg cholesterol or 0.5 g sugar.
Low	The reference amount contains no more than 40 calories; 140 mg sodium; 3 g fat; 1 g saturated fat; 20 mg cholesterol.
Lean	The reference amount of meat, poultry, seafood, and game meats contains less than 10 g fat, 4.5 g or less saturated fat and less than 95 mg cholesterol.
Extra lean	The reference amount contains less than 5 g fat, 2 g saturated fat, and 95 mg cholesterol.
High	The reference amount contains 20% or more of the Daily Value for a particular nutrient.
Good source	The reference amount contains 10-19% of the Daily Value for a particular nutrient.
Reduced	The reference amount of a nutritionally altered product contains 25% less of a nutrient or 25% fewer calories than a reference food. "Reduced" cannot be used if the reference food already meets the requirement for a "low" claim.
Less	The food contains 25% less of a nutrient or 25% fewer calories than a reference food.
Light	(1) If 50% or more of the calories are from fat, the fat must be reduced by at least 50% per reference amount; or if less than 50% of the calories are from fat, the fat must be reduced at least 50% or calories reduced at least 1/3 per reference amount. OR (2) The sodium is reduced by 50%. OR (3) The term identifies a specific food with a definition and standard of identify. Example: "Light Cream" is a cream that contains not less than 18 percent but less than 30 percent milk fat.
More	A serving contains at least 10% more of the Daily Value of a nutrient than a reference food.
% Fat free	A product must be low-fat or fat-free, and the percentage must accurately reflect the amount of fat in 100 g of a food. Thus, 2.5 g of fat in 50 g of food results in a "95% fat-free" claim.
Healthy	A food is low in fat and saturated fat, and a serving contains no more than 480 mg sodium and no more than 60 mg of cholesterol. A "healthy food" contains at least 10% of Daily Value/Reference Amount (DV/RA) for vitamins A or C, calcium, iron, protein or fiber.
Fresh	1) A food is raw, has never been frozen or heated, and contains no preservatives. OR (2) The term accurately describes the product "fresh milk," or "freshly baked bread").
Fresh frozen	The food has been quickly frozen while still fresh; blanching is allowed before freezing to prevent nutrient breakdown.

The Food and Drug Administration will not allow the use of the above nutrient claims on infant and toddler foods. The terms "unsweetened" and "unsalted" are allowed on infant and toddler foods because they relate to taste and not nutrient content.





# Understanding Food Labels: What's in a Food?

## The Nutrition Panel

The nutrition panel provides information on the nutrient content of a food. This panel is headed by the title, "Nutrition Facts." See the sample of a nutrition panel on the next page. Under the Nutrition Labeling and Education Act (NLEA), nutrition information must be listed for the following nutrients unless the food qualifies for a simplified form:

- total calories
- total fat
- cholesterol
- total carbohydrate
- calories from fat
- saturated fat
- sodium
- dietary fiber

- sugars
- vitamin A
- calcium
- protein
- vitamin C
- iron

By 2006, information on trans fat will be required. Labels may also include information on: polyunsaturated fat, monounsaturated fat, potassium, soluble fiber, insoluble fiber and other essential vitamins and minerals. Information from the nutrition panel can be used to see if diets are meeting the Dietary Guidelines. The Dietary Guidelines recommend that 30% or less of a diet's calories come from fat daily and less than 10% of daily calories come from saturated fat.

### Determining Percent of Calories from Fat in a Day's Diet

1. Total number of grams of fat in a \_\_\_\_ (1)  
day's diet.
2. Multiply grams of fat (1) by 9 to \_\_\_\_ (2)  
find total calories from fat for the  
day. (9 calories per fat gram)
3. Total calories from the day's diet \_\_\_\_ (3)
4. Divide the total calories from fat \_\_\_\_ (4)  
(2) by total calories for the day (3).
5. Multiply (4) by 100 to find percent \_\_\_\_ (5)  
of calories fro fat in the day's diet.

Example:

- |                                      |             |
|--------------------------------------|-------------|
| 1. Grams of fat.                     | <u>50</u>   |
| 2. Calories from fat.                | <u>450</u>  |
| 3. Total calories in the day's diet. | <u>1500</u> |
| 4. Step 2 divided by step 3.         | <u>0.30</u> |
| 5. Percent of calories from fat.     | <u>30%</u>  |

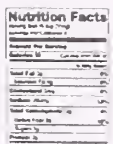
### Determining Percent of Calories from Fat in a Serving of Food

1. Total number of grams of fat in a \_\_\_\_ (1)  
serving of food.
2. Multiply grams of fat (1) by 9 to \_\_\_\_ (2)  
find total calories from fat in a  
food. (9 calories per fat gram)
3. Total calories in the serving. \_\_\_\_ (3)
4. Divide the total calories from fat \_\_\_\_ (4)  
(2) by total calories in (3).
5. Multiply (4) by 100 to find percent \_\_\_\_ (5)  
of calories from fat in the food.

Example:

- |                                  |             |
|----------------------------------|-------------|
| 1. Grams of fat.                 | <u>3</u>    |
| 2. Calories from fat.            | <u>27</u>   |
| 3. Total calories in the food.   | <u>90</u>   |
| 4. Step 2 divided by step 3.     | <u>0.30</u> |
| 5. Percent of calories from fat. | <u>30%</u>  |





# How to Read a Nutrition Facts Label

## Macaroni & Cheese

Start Here →

Limit these  
Nutrients

Get Enough  
of these  
Nutrients

Footnote

Nutrition Facts			
Serving Size 1 cup (228g)			
Serving Per Container 2			
Amount Per Serving			
Calories 250		Calories from Fat 110	
		% Daily Value*	
Total Fat 12g		18%	
Saturated Fat 3g		15%	
Cholesterol 30mg		10%	
Sodium 470mg		20%	
Total Carbohydrate 31g		10%	
Dietary Fiber 0g		0%	
Sugars 5g			
Protein 5g			
Vitamin A		4%	
Vitamin C		2%	
Calcium		20%	
Iron		4%	
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Quick Guide  
to % DV

5% or less  
is Low

20% or more  
is High

1. Look at the Nutrition Facts panel for the serving size and number of servings in the package.
2. Calories provide a measure of how much energy you get from a serving of this food. The label also tells you how many calories in one serving come from fat.
3. The nutrients listed first are the ones Americans generally eat in adequate amounts or even too much. **Limit these nutrients—total fat, cholesterol, and sodium.** Eating too much fat or too much sodium may increase your risk of certain chronic diseases, like heart disease, some cancers, or high blood pressure. Eating too many calories is linked to overweight and obesity.
4. **Get enough of these nutrients – dietary fiber, vitamin A, vitamin C, calcium, and iron.** Eating enough of these nutrients can improve your health and help reduce the risk of some diseases and conditions.
5. The percent daily value (%DV) tells you whether the nutrients in a serving of food contribute a lot or a little to your total diet. %DV is based on recommendations for a 2000 calorie diet.

Nutrition Facts	
Serving Size 1/2 cup (125g)	
Amount Per Serving	
Calories 100	Calories from Fat 25
Total Fat 5g	
Saturated Fat 3g	
Cholesterol 10mg	
Sodium 100mg	
Total Carbohydrate 20g	
Dietary Fiber 5g	
Sugars 10g	
Protein 5g	

## Understanding Food Labels: What's in a Food?

**Daily Reference Values and Percent Daily Value** are both new under the NLEA. Daily reference values, or "daily values", are included for total fat, saturated fat, cholesterol, sodium, total carbohydrate and fiber. The daily values provide recommendations for daily intake of the nutrients based on daily caloric intakes of 2000 and 2500 calories. Some of these daily values are maximums, as with total fat (65 grams or less). Others are minimums, as with carbohydrates (300 grams or more). Review the lower section of the sample Nutrition Facts label on the preceding page.

Percent daily values are a quick way to know if a food is high or low in a nutrient. The daily values show how well the nutrients in a food fit into an overall daily diet with 2000 calories. The sample label in this section shows that 18% of the daily value for total fat and 15% of the daily value for saturated fat are provided by one serving (based on a 2000 calorie intake).



## Some Things to Know About Grains/Breads



Grains/Breads are credible if made from whole-grain, bran, germ or enriched meal and/or flour. Refer to the Crediting Foods section of What's In a Meal? for required serving sizes of grains/breads products.

Grains/Breads products are rich sources of protein, B-vitamins (thiamin, riboflavin and niacin) and iron. In addition, whole-grain breads and cereals provide folate, vitamins B6, A and E; the antioxidant nutrients vitamin E and selenium; and the minerals zinc and copper. Usually whole-grain breads (whole wheat or whole grain listed **FIRST** in the ingredient list) provide more vitamins and minerals than refined enriched products such as white bread.

Most bread products contain significant quantities of **dietary fiber**. Check the label for fiber content. Breads with two or more grams of fiber per slice are good sources of fiber.

**Flour** is made by finely grinding and sifting wheat or other grains. Flour may be from any grain (wheat, rye, corn, etc.).

**Meal** is made by coarsely grinding corn, oats, wheat, etc.

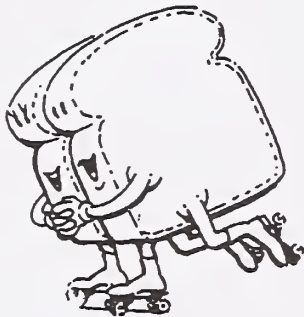
**Whole-grain** is the edible part of wheat, corn, rice, oats, rye, barley, etc. "Whole-grain flour" is made by grinding the entire grain and includes the bran, the germ and the endosperm. If a flour or meal does not contain all parts of the grain, it is not whole-grain.



Nutrition Facts	
Serving Size 1/2 cup (125g)	
Amount Per Serving	
<b>Total Fat</b> 15g	30%
<b>Cholesterol</b> 15g	30%
<b>Sodium</b> 15g	30%
<b>Total Crap</b> 15g	30%
<b>Iron</b> 15g	30%
<b>Protein</b> 15g	30%

**Refined** grains have their coarse parts removed. Refined flour does not include the bran or germ. When the bran and germ are removed, some essential nutrients, including fiber, are lost. White bread and hot dog buns are examples of breads that are often made from refined flours. Refined bread products are only creditable for the CACFP if they are enriched and/or fortified.

**Enrichment** of bread or bread products refers to the process by which nutrients (thiamin (B<sub>1</sub>), niacin (B<sub>2</sub>), riboflavin (B<sub>3</sub>), and iron) are added to refined grains and grain products at levels specified by law. If the flour in the product is enriched, the ingredient statement will indicate that enriched flour was used. A bread product, rather than the flour, may also be enriched. In this case, the ingredient list will show that thiamin, riboflavin, niacin and iron were added to the product.



**Fortification** refers to the addition of one or more vitamins, minerals or proteins to a food. If a food is fortified, then the label will

state specifically that it is fortified.

**Whole-wheat bread** contains the whole grain, including the fiber-rich bran and germ. Whole-wheat flour should be the first ingredient.

**Wheat bread** often has wheat flour or enriched wheat flour (not whole-wheat flour) as the main ingredient. This bread is low in fiber unless the manufacturer has added fiber.

**Oat bread** is usually white bread with a small amount of oats added. Check the

What's in a Meal?

ingredient list to see how far down on the list "oats" are listed. If it appears toward the end of the list, the bread contains little fiber.

## Some Things to Know About Fruit Juices



Full-strength (100%) fruit juices are creditable.

**Full-strength fruit juice** is a product which contains no additional water or other ingredients such as sweeteners, spices or flavorings. Examples of full-strength fruit juice are: apple (including cider), grape, grapefruit, orange, pineapple, prune, tangerine and any combination of any of these full-strength juices.

Fruit drinks are beverages that contain full-strength juice along with added water, and possibly other ingredients such as sweeteners, spices or flavorings. Some commonly seen fruit drinks that cannot count toward the meal pattern include: nectars, lemonade or cranberry juice cocktail. These drinks contain less than 50% full-strength juice.

Fruit juice labels should be read carefully. Look for 100% fruit juice. Other juice products contain water and sweeteners such as corn syrup or sugar.

Some State agencies and sponsors credit only full-strength juices (100%). Others may credit fruit drinks that contain at least 50% fruit juice when twice the required amount is served.



Nutrition Facts	
Amount Per Serving	
Calories 100	
Total Fat 10g	
Sodium 100mg	
Total Crap 10g	
Protein 10g	
Dietary Fiber 10g	
Sugars 10g	
Cholesterol 10g	
Vitamins 10g	
Minerals 10g	
Other 10g	

## Understanding Food Labels: What's in a Food?

### Some Things to Know About Processed Meats

Frankfurters, bologna, knockwurst and Vienna sausage may be served in the CACFP. Only the meat in these products can be credited. Many processed meats contain large amounts of binders and extenders. Therefore, the composition of these processed meats must be known in order to properly credit the meat/meat alternate portion.

Binders and extenders hold processed meats together and may aid in retaining product moisture. When the binder/extender is a fortified vegetable protein product, it may be credited along with the meat portion of the product. All other binders and extenders may not count as meat/meat alternates.

Examples of binders/extendrs include:

- soy flour \*
- starchy vegetable flour
- calcium reduced dried skim milk

- soy protein concentrate \*
- cereal
- isolated soy protein \*
- dried milk
- carrageenan

*\* These products can generally be categorized as vegetable protein products (VPP), and **only** when fortified and used according to regulations (7 CFR 226, Appendix A) can they be credited toward the meal pattern as a meat alternate.*

It is recommended that processed meat products containing any non-VPP binders/extendrs not be credited because it is difficult to determine the amount of meat in these products. Meat products without binders/extendrs may be fully credited based on weight. An exception to this rule is a meat product with fortified VPP as the only binder/extender.



Nutrition Facts	
Amount Per Serving	
Calories	
% Daily Value	% Daily Value
Total Fat	
Sodium	
Total Carbohydrate	
Protein	
Dietary Fiber	
Sugars	
Vitamins	
Minerals	

## Reading Ingredient Lists

Ingredient lists can be used to determine if some foods such as processed meats and juices meet the meal pattern requirements.

### Processed Meats

#### Frankfurters

Ingredients: pork, turkey, water, salt, corn syrup, dextrose, flavoring, sodium erythorbate, sodium nitrite.

These frankfurters are **creditable** toward the meal pattern because they are all meat and do not contain binders/extendors. The serving size will be based on the weight of the product.

#### Low Fat Polish Sausage

Ingredients: pork, water, turkey, beef, starch (modified food and vegetable), hydrolyzed milk protein, dextrose, corn syrup, salt, flavorings, autolyzed yeast, sodium lactate, sodium phosphate, gelatin, vitamin C (ascorbic acid), sodium nitrite.

This label shows that the product contains modified food and vegetable starch and hydrolyzed milk protein which are binders/ extendors. These sausages are **creditable only if** the manufacturer provides sufficient information on the amount of meat in a serving. Only the meat portion is creditable. Also refer to information on processed meats in this section.

### Fruit Juices

#### Apple Mixed Fruit Juice - 100 % Pure Fruit Blend

Ingredients: concentrated juices (apple, grape, pear, and boysenberry), water, a combination of citric acid, calcium hydrate, and malic acid (calcium fortification), natural flavor, and vitamin C.

This juice is **creditable** because it is a full-strength fruit juice. Juices are not full-strength when sweeteners, spices and flavorings are added.

#### Fruit Punch

Ingredients: water, corn syrup, fruit juice from concentrate (apple, pineapple, cherry), citric acid, xanthan gum, sodium citrate, ascorbic acid (vitamin C), gum arabic, glycerol abietate, brominated vegetable oil, citrus oils, natural and artificial flavors, artificially colored (red #40).

Fruit punch is **not creditable**. Fruit punch commonly contains less than 50% full-strength fruit juice. Some State agencies and sponsors credit only full-strength (100%) fruit juice. Others may credit fruit drinks that contain at least 50% fruit juice when twice the required amount is served.

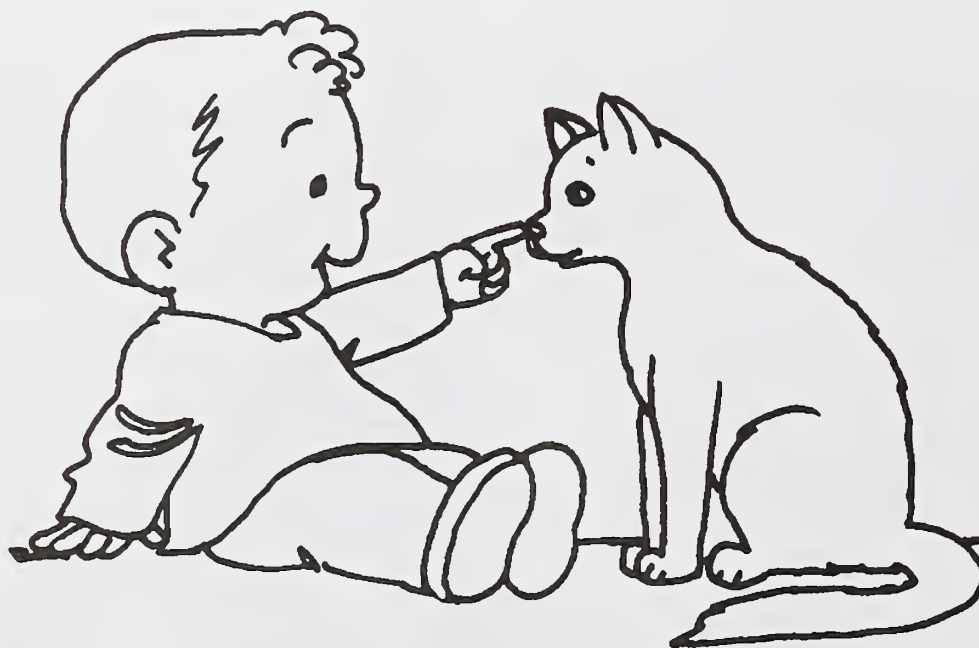
Nutrition Facts	
Serving Size 1/2 cup	
Amount per Serving	
Calories 100	Calories from Fat 0
Total Fat 2g	
Sodium 100mg	
Total Cholesterol 0mg	
Total Carbohydrate 10g	
Dietary Fiber 0g	
Sugars 0g	
Protein 0g	

## Understanding Food Labels: What's in a Food?

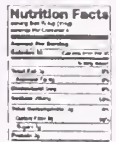
### Crediting Commercial Grains/Breads Products

Purchasing ready-made bread products can save time. The following information will help in the selection of creditable products and correct serving sizes.

The weight and "Nutrition Facts" label on the product package may be used to determine the CACFP serving size. A step-by-step example of how this can be done for purchased graham crackers is found in this section. To determine the CACFP serving size for other purchased products, use the blank worksheet in this section.







## Determining the CACFP Serving Size Based on Package Information

### Example: Graham Crackers

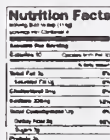
#### Determining the Amount of Food Needed to Equal One CACFP Serving

1. Determine the serving size needed for the age being served using the Meal Pattern chart in the Crediting Foods section. 1/2 (1)  
*3-5 year olds need 1/2 slice of bread or equivalent*
2. Using the Grains/Breads chart in the Crediting Foods section, select the group that includes the food being evaluated and determine the weight in grams of a CACFP serving. B/13 (2)  
*1/2 slice of bread or equivalent in Group B = 13 grams or 0.5 oz*
3. Find and record the net weight stated on the food package. 454 (3)  
*Net package weight = 454 gm (1 lb)*
4. Divide the package weight (3) by the CACFP serving weight (2) to determine the number of CACFP servings in the package.\* 35 (4)  
*454 grams in package divided by 13 gm in one CACFP serving = 35 CACFP servings*
5. Use the "Nutrition Facts" label to determine the number or amount of food items in the package by multiplying the serving size by the servings in the package. 128 (5)  
*16 servings of 8 crackers (8 x 16) = 128 crackers in the package*
6. Divide the total number of items in the package (5) by the number of CACFP servings (4) to show how many items must be served for one CACFP serving for this age group. Round up to the nearest reasonable serving.\* 4 (6)  
*128 crackers divided by 35 CACFP servings = 3.6 crackers. Round up to 4.*

\* Because of rounding, a package may not have as many CACFP servings as calculated by weight.

#### Determining the Amount of CACFP Servings in One Serving of Food

1. Determine the serving size needed for the age being served using the Meal Pattern chart in the Crediting Foods section. 1/2 (1)  
*3-5 year olds need 1/2 slice of bread or equivalent*
2. Using the Grains/Breads chart in the Crediting Foods section, select the group that includes the food being evaluated and determine the weight in grams of a CACFP serving. B/13 (2)  
*1/2 slice of bread or equivalent in Group B = 13 grams or 0.5 oz*
3. Using the "Nutrition Facts" label, determine the weight in grams of one serving of food. 28 (3)  
*package lists 1 serving as 28 grams*
4. Divide the weight of one serving of food (3) by the weight required for one CACFP serving (2). Round down to the nearest quarter serving. 2 (4)  
*28 grams in one serving of food divided by 13 grams in one CACFP serving = 2.15 servings. Round down to 2.*  
*Note that the CACFP serving in this example is 1/2 of the manufacturer's serving size.*



## Understanding Food Labels: What's in a Food?

### Determining the CACFP Serving Size Based on Package Information Worksheet

#### Determining the Amount of Food Needed to Equal One CACFP Serving

1. Determine the serving size needed for the age being served using the Meal Pattern chart in the Crediting Foods section. \_\_\_\_\_ (1)
2. Using the Grains/Breads chart in the Crediting Foods section, select the group that includes the food being evaluated and determine the weight in grams of a CACFP serving. \_\_\_\_\_ (2)
3. Find and record the net weight stated on the food package. \_\_\_\_\_ (3)
4. Divide the package weight (3) by the CACFP serving weight (2) to determine the number of CACFP servings in the package.\* \_\_\_\_\_ (4)
5. Use the "Nutrition Facts" label to determine the number or amount of food items in the package by multiplying the serving size by the servings in the package. \_\_\_\_\_ (5)
6. Divide the total number of items in the package (5) by the number of CACFP servings (4) to show how many items must be served for one CACFP serving for this age group. Round up to the nearest reasonable serving.\* \_\_\_\_\_ (6)

\* Because of rounding, a package may not have as many CACFP servings as calculated by weight.

#### Determining the Amount of CACFP Servings in One Serving of Food

1. Determine the serving size needed for the age being served using the Meal Pattern chart in the Crediting Foods section. \_\_\_\_\_ (1)
2. Using the Grains/Breads chart in the Crediting Foods section, select the group that includes the food being evaluated and determine the weight in grams of a CACFP serving. \_\_\_\_\_ (2)
3. Using the "Nutrition Facts" label, determine the weight in grams of one serving of food. \_\_\_\_\_ (3)
4. Divide the weight of one serving of food (3) by the weight required for one CACFP serving (2). Round down to the nearest quarter serving. \_\_\_\_\_ (4)



Nutrition Facts	
Serving Size 1/2 cup (125g)	
Amount Per Serving	
Total Fat 10g	20%
Sodium 10g	20%
Total Crap 10g	20%
Percent Daily Values are based on a diet of other people's secrets.	

## Commercially Processed Combination Foods

It is very difficult to determine the amount of bread, meat, fruit or vegetables in some commercially prepared foods. For example, the amount of meat or cheese in frozen ravioli, the amount of tomato in canned chili, the weight of the crust in a pizza, or the amount of breading on fish sticks may not be known. Foods should not be credited toward meeting a meal component when the actual content (i.e. meat, bread) is not known.

A food can be credited when documentation shows that the food contains enough of specific ingredient(s) to count toward the meal pattern. Two types of documentation are acceptable. These are a manufacturer's analysis sheet or a Child Nutrition label.

### Analysis Sheets

A commercially processed combination food can be credited when a product analysis sheet is on file. It must include a statement of the amount of cooked lean meat/meat alternate, grains/breads and/or fruit/vegetable components provided by the food per serving. This analysis must be signed by an official of the manufacturer (not a salesperson). Contact your State agency or sponsor for more information.

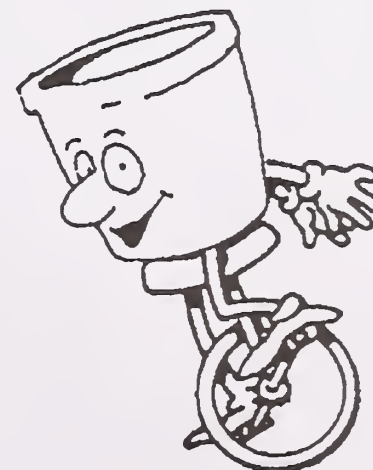
## Child Nutrition Labels

The USDA Food and Nutrition Service (FNS) offers a voluntary technical assistance program called the Child Nutrition (CN) Labeling Program for food companies who manufacture meat and poultry products or fruit juices. CN labels list information about a food's contribution toward the meal pattern.

The CN labeling process involves a review of the manufacturer's recipe to determine the contribution that a serving of the commercially prepared product makes toward the meal pattern requirements. CN labels state a product's contribution toward the meal pattern requirements.

Products that can be CN labeled include meat/meat alternate products or fruit juices that contribute to the meal pattern. For example, CN labels may appear on: frankfurters, pizza, breaded chicken patties and apple juice.

CN labeled products are usually packaged in bulk quantities. Schools and institutions that serve meals to large groups of people commonly purchase these foods. CN labeled products are not typically found in neighborhood grocery stores.





Nutrition Facts	
Amount Per Serving	
Calories 0	Calories 0
% Daily Value*	% Daily Value*
Total Fat 1g	2%
Sodium 1g	20%
Total Crap 1g	2%
Total Crap 1g	2%
Total Crap 1g	2%
Total Crap 1g	2%
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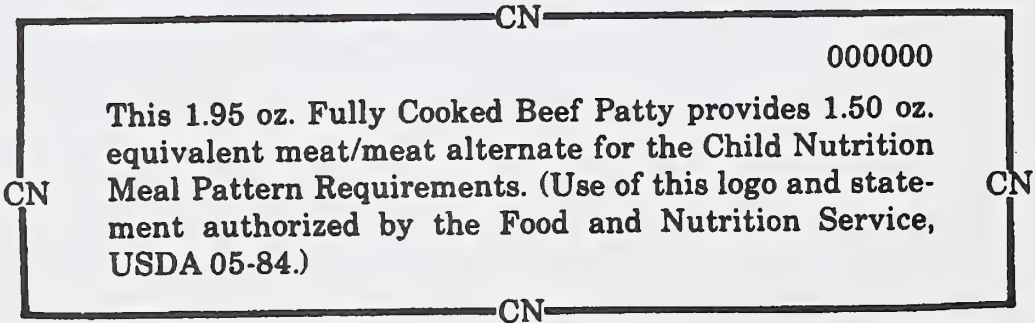
# Understanding Food Labels: What's in a Food?

The CN label is a food product label that contains a CN label statement and CN logo. The logo is a distinct border around the edges of the CN label statement. The CN label statement includes:

- a statement of the product's contribution toward meal pattern requirements
- a six-digit product identification number
- a statement specifying that the use of the CN logo and CN statement was authorized by FNS
- the month and year of approval

A CN label on a product does not mean that a food provides an entire serving of a meal component. When using CN labeled products, be sure that the amount served meets the CACFP meal pattern quantity requirements.

CN labels do not address the nutritional value of a product. They only address a product's contribution to the meal pattern. The purpose of a CN label is not to provide nutrition information. For information on the food's nutritive value, review the "Nutrition Facts" label, the ingredient list and/or the manufacturer's nutrient analysis sheet.



Child and Adult Care Food Program Meal Pattern for Infants			
	Birth through 3 months	4 through 7 months	8 through 11 months
Breakfast	4-6 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup>	4-8 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup>  0-3 tablespoons of infant cereal <sup>1,4</sup> (optional)	6-8 fluid ounces of formula or breast milk <sup>2,3</sup> ; and 2-4 tablespoons of infant cereal <sup>1</sup> ; and 1-4 tablespoons of fruit or vegetable or both
Snack	4--6 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup>	4-6 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup>	2-4 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup> or fruit juice <sup>5</sup> ; and 0-1/2 bread <sup>4,6</sup> or 0-2 crackers <sup>4,6</sup>
Lunch or Supper	4-6 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup>	4-8 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup> ;  0-3 tablespoons of infant cereal <sup>1,4</sup> ; and  0-3 tablespoons of fruit or vegetable or both <sup>4</sup>	6-8 fluid ounces of formula <sup>1</sup> or breast milk <sup>2,3</sup> ;  2-4 tablespoons of infant cereal <sup>1</sup> ; and/or  1-4 tablespoons of meat, fish, poultry, egg yolk, or cooked dry bean or peas; or  1/2-2 ounces cheese; or  1-4 ounces (volume) cottage cheese; or  1-4 ounces (weight) of cheese food, or cheese spread; and  1-4 tablespoons fruit or vegetable or both

<sup>1</sup> Infant formula and dry infant cereal must be iron-fortified.

<sup>2</sup> Breast milk or formula, or portions of both, may be served; however, it is recommended that breast milk be served in place of formula from birth through 11 months.

<sup>3</sup> For some breast-fed infants who regularly consume less than the minimum amount of breast milk per feeding, a serving of less than the minimum amount of breast milk may be offered, with additional breast milk offered if the infant is still hungry.

<sup>4</sup> A serving of this component is required when the infant is developmentally ready to accept it.

<sup>5</sup> Fruit juice must be full-strength.

<sup>6</sup> A serving of this component must be made from whole-grain or enriched meal or flour.

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# Feeding Infants

## The Infant Meal Pattern

The infant meal pattern chart, located on this section's divider page, shows the types and amounts of foods that must be served to infants. The first year of life, from birth until the baby's first birthday, is divided into three age groups, each consisting of 4 months.

There are ranges given for each food portion in the meal pattern to allow for flexibility in how much food is served to the baby, based on his or her appetite and development. The amounts listed are the minimum portions required to meet the meal pattern requirements. Some babies may need more than these amounts. Babies can be served larger portions or additional foods.

In the 4 through 7 month age group, the portions for solid foods are listed as 0 to 3

tablespoons. Solid foods are optional for this age group. Solid foods should not be fed to children who are not developmentally ready for them.

Food served should always be of appropriate texture and consistency. Solid food can be introduced gradually to infants, who are four months of age or older. The decision to introduce solid foods should always be made in consultation with the parents.

Babies may have small appetites. They may not be able to eat a complete meal at one time. Foods may be served over a period of time, rather than at one time. For example, the food items required for lunch can be served at two or more feedings when proper food safety precautions are followed.





## Breast Milk

Breast milk may be served as part of the infant meal pattern. Infants, mothers and child care providers benefit when infants are breast-fed. Some advantages of using breast milk include:

- Breast milk is the best food for a baby because it provides energy and all the right vitamins and minerals in appropriate amounts.
- Breast milk contains antibodies which protect the infant's digestive tract from infection. These antibodies are not present in infant formula or cow's milk.
- Breast milk is easy for the infant to digest. At birth, the infant's digestive system is not fully developed, making it difficult to digest cow's milk protein, casein. Breast milk protein forms an easy-to-digest curd, unlike casein, which forms a tough curd in the infant's stomach.
- Breast milk is ready-to-feed and does not cost anything.
- Allergic reactions to breast milk are minimal. Breast-fed babies do not get sick as often as formula-fed babies.
- Breast-fed babies have constipation and diarrhea less often.
- Breast-feeding provides the mother and child a great opportunity to form a close bond.

Many mothers wish to continue breast feeding after they return to work.

Providers can help mothers continue to breast-feed by letting them know that Breast-feeding is a good idea and that they are happy to feed their babies breast milk.

The publication, *Feeding Infants: A Guide for Use in the Child Nutrition Programs (FNS-258)*, is an excellent resource available from your State agency or sponsor. They may also have other information on how to keep breast milk safe and how to care for breast-fed babies.

## Iron-Fortified Infant Formula

Iron-fortified infant formula is the best food for the baby when the baby is not being breast-fed or when a supplement to Breast-feeding is needed.

Infant formula means any iron-fortified formula intended for dietary use solely as a food for normal, healthy infants; excluding those formulas specifically formulated for infants with inborn errors of metabolism or digestive or absorption problems. Infant formula, as served, must be in liquid state at recommended dilution.

The formula label must state "with iron" or "iron-fortified." Formula labels which say "low iron" do not meet the meal pattern requirements. Low-iron or other formulas may be served only as a dietary substitute when a note from a medical doctor or other recognized medical authority, requiring its use, is on file.





## Milk

Whole cow's milk may not be served to infants less than 12 months of age. All reimbursable infant meals must include either breast milk or iron-fortified infant formula. The American Academy of Pediatrics does not recommend serving cow's milk to children under one. Contact your State agency or sponsor for information.

## Sanitation, Food Preparation and Safe Food Handling

Babies are more susceptible to bacteria than older children. Unsanitary food conditions can cause serious illness or death. Take extra care when handling babies' food, bottles and utensils to make sure they are safe and clean. Thoroughly wash hands with warm soapy water before handling any food or bottles.

Proper hand washing can help prevent the spread of illness in child care settings. Hands should be washed after changing each baby's diaper and clothing. Diapers can be a major source of contamination and the spread of disease.

It is important to keep cold foods cold and hot foods hot. When foods are out of a safe temperature zone, bacteria are more likely to grow and multiply. Contact your local health department for safe food storage temperatures.

## Bottle Feeding

### Purchasing Formula

- Select ready-to-feed formula, because it is the most convenient and sanitary.
- Use either milk-based or soy-based formulas.
- Do not purchase cans of infant formula that have dents, bulges or rust spots.
- Check the expiration date on the formula lid or label to make sure the product is not too old.

Some State licensing agencies allow powdered formula to be used. In other States, only ready-to-feed liquid formulas can be served. If powdered or liquid concentrate is used, the formula must be mixed very carefully according to the directions on the container.

Under-diluted formula (containing too little water) puts an excessive burden on the baby's kidneys and digestive system and may lead to dehydration.

Over-diluted formula (containing too much water) may interfere with the baby's proper growth because it does not contain adequate calories and nutrients.







### Preparing Formula

Follow the steps below when preparing formula for infants.

1. Wash hands with soap and water.
2. Wash all equipment (nipples, bottles, rings and caps) in hot soapy water and scrub with a brush.
3. Rinse all equipment thoroughly in hot water.
4. Put nipples, bottles, rings and caps in a pot with enough water to cover them.
5. Boil for five minutes.
6. Wash hands with soap and water.
7. Wash the top of the formula can, then open.
8. Pour formula for one feeding into each clean bottle.
9. Put clean nipple on bottle and cover with a snap-on cap.

It is preferable that cold tap water or bottled water be used in the preparation of infant formula. Using hot tap water in the preparation of formula may lead to a high risk of lead exposure. Severe lead exposure can cause coma, convulsions and even death in children. Lower levels of lead exposure can cause adverse effects on a child's central nervous system and kidney. Lower levels of lead exposure also have been associated with decreased intelligence, growth, stature, hearing and a difficulty in maintaining a steady posture.

### Storing Formula and Breast Milk

- Refrigerate prepared bottles of formula for up to 24 hours.
- Open cans of formula should be covered, refrigerated and used within 48 hours.
- Expressed breast milk may be stored in the refrigerator or freezer in either sterilized bottles or disposable plastic nursing bags.
- Expressed breast milk will keep in the refrigerator for up to 48 hours or in the freezer for up to 2 weeks after the time it was collected. Be sure the milk is protected in an air-tight container while in the freezer. Once the milk is thawed, do not refreeze.
- Portions of breast milk or formula remaining in the bottle after a feeding should be discarded.

### Warming Bottles

For babies who prefer a warm bottle, warm bottles of breast milk, formula or whole milk immediately before serving.

To thaw frozen breast milk, hold bottle under cool to warm water. Shake bottle gently to mix. Do not refreeze breast milk.

Bottles may be warmed by setting them in a bowl of warm water or by holding under warm tap water. Test the temperature of milk or formula on the inner wrist before feeding to infants. If milk is too hot, wait a few minutes and repeat this test. Do not serve milk to infants that is too hot.



**Never use a microwave to warm bottles.** This practice is potentially dangerous for several reasons. Liquid in the bottle may become very hot when microwaved and get hotter after removing from the microwave even though the bottle feels cool. The hot liquid could seriously burn babies. Also, microwaving can destroy some of the nutrients in breast milk. Covered bottles may explode when heated in a microwave.

## Baby Foods

### Purchasing Commercially Prepared Baby Foods

For babies 6 to 12 months of age, choose baby foods that increase in thickness and consistency, to challenge the baby to learn new mouth skills.

To meet the meal pattern requirements, avoid combination foods or dinners because it is difficult to determine the amount of each component in combination foods. Also, they generally have less nutritional value by weight than single-ingredient foods and cost more than items purchased separately.

Commercial baby food fruits and vegetables which contain single or multiple fruits or vegetables and list fruit or vegetable as the first ingredient in the ingredient listing on the label are reimbursable as a meal component in the fruit or vegetable category in the Infant Meal Pattern.

Commercial plain strained baby food meats (including those with beef, chicken, turkey, lamb, veal, and ham) are reimbursable as a meal component in the meat/meat alternate category in the Infant Meal Pattern. Note that baby food meat products (i.e., Beef and Beef Gravy, Chicken and Chicken Gravy, Ham and Ham Gravy, Lamb and Lamb Gravy, Turkey and Turkey Gravy, and Veal and Veal Gravy) are reimbursable even if they do contain additional ingredients, such as corn starch and, in some cases, lemon juice concentrate.

Read the ingredient list on the food label carefully. Avoid those with added fat, salt, sugar, modified corn starch or modified tapioca starch.

Desserts, such as baby puddings, custards, cobblers and fruit desserts, should be avoided because they are high in sugar. Babies do not need added sugar. They should be given the opportunity to eat naturally sweet foods, such as fruit.

Fruit juices containing 100% juice are creditable at snacks only for infants eight through eleven months old. No other juices or juice drinks are creditable. It is recommended that only pasteurized juice be served. Look for juice that contains vitamin C, as this promotes the absorption of iron from food into the body.

Iron-fortified infant cereals with at least 45% of the Daily Value for iron (from the nutrition facts label) must be provided until the infant turns one year of age. Other cereals, including non-infant cereals, can be served as additional foods.





## Serving Commercially Prepared Baby Food



- Be sure the vacuum seal has not been broken before using. The jar should “pop” when opened.
- Do not use the baby food jar as a serving dish. Remove the amount of food needed to feed the baby from the jar and put it in a dish for serving.
- Place strained meats or egg yolks in a microwave-safe dish before heating in the microwave. These foods can become very hot and splatter or explode if overheated in the original jar. Most other foods can be safely warmed in the microwave if the label directions are followed. Baby foods should be warmed to body temperature, not made hot, by heating only a few seconds at reduced power. Be sure to stir the food well after heating.
- Throw away any leftover food. Do not put it back into the jar, because it could cause contamination.
- Once the jar is opened, store it in the refrigerator. Food should be used as soon as possible, but at least within two to three days.

## Preparing Baby Food at Home

Preparing homemade baby food has several advantages. It is more economical and the provider can ensure the quality of the food.

Commercial baby foods may lack enough texture for the older baby. The texture can be modified when homemade baby food is prepared.

Care should be taken to ensure food is washed, cooked and properly handled. Due to the possibility of contracting botulism from spores in the ground, it is recommended that root vegetables, such as beets, carrots and potatoes not be fed to infants less than 6 or 8 months of age.

When preparing homemade baby food, follow these steps.

- Make sure hands, utensils, work space and the food are all very clean.
- Begin with good quality food. Use fresh food whenever possible.
- Remove skins, pits and seeds from fruits and vegetables. Cut away all fat, gristle, skin and bones from meat, poultry and fish.
- Cook foods until they are soft and tender. To minimize vitamin loss, steam fruits and vegetables. Roast, simmer or braise meat.
- Modify the texture by mashing food with a fork, grinding with a food grinder or by pureeing in a blender.





## Foods That Cannot Be Credited

Foods that cannot be credited toward the infant meal pattern include:

- foods with water listed as the first ingredient
- combination foods or dinners
- baby desserts
- fruit juice and juice drinks other than 100% fruit juice
- vegetable juice
- jarred cereals with or without fruit
- iron-fortified dry infant cereals containing fruit
- “adult” cereals

Refer to Infant Foods in the Crediting Foods section for other foods that are not creditable.

## Foods to Avoid or Limit

Some foods which commonly cause allergic reactions in infants should not be served during their first year. These include cow's milk, nuts, seeds and nut and/or seed butters, chocolate, citrus fruits, egg whites, and shellfish.

Honey should never be served to infants because it may contain botulism spores. The spores can cause severe food

poisoning. After digestive systems mature, honey can be tolerated.

Sugar, salt, and butter or margarine should not be added to infant foods to provide flavor. It is best for children to develop a liking for the natural flavors of foods.

Infants can choke on foods, such as frankfurter rounds, popcorn, grapes, dried fruit, whole pieces of canned fruit, peanut butter, nuts, and raw carrots. Furthermore, foods should be cut length-wise, rather than in circles, to prevent choking.

## Baby Bottle Tooth Decay

Baby bottle tooth decay can occur when babies regularly fall asleep with bottles in their mouths. To prevent baby bottle tooth decay:

- Feed only breast milk, formula, milk or water from a bottle. Never put juice, soda pop or other sweetened drinks in a bottle. Serve juice in a cup.
- Offer the bottle only at feeding time, not at nap time. If a baby falls asleep during feeding, move the baby around a bit to stimulate swallowing before putting the baby down to sleep.
- Do not use a bottle of cold juice to soothe a teething baby's gums. Instead, use a clean favorite rattle or teething ring that has been cooled in the refrigerator or freezer.



## Feeding Infants

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Notes:









# Handling Foods for Safety

## Foodborne Illness

The United States has one of the safest food supplies in the world. However, at least seven million people are affected by foodborne illness (food poisoning) each year. Many cases of foodborne illness are not reported because they are confused with the “flu”.

People who have foodborne illness usually feel sick for just a few days. Some individuals though, especially babies, small children and the elderly, may be more severely affected. In very severe cases, foodborne illness can require hospitalization and may even cause death.

Bacteria, viruses, parasites and fungi all cause foodborne illness. They cannot be seen, tasted or smelled. They hide on bodies, in the air, on kitchen counters and on utensils; they are even in food. Bacteria cause most foodborne illnesses. Just because bacteria are in food does not make the food unsafe to eat. Bacteria need a chance to grow before they become

dangerous. Proper food handling practices reduce the likelihood that bacteria will be allowed to grow and contaminate the food.

Foodborne illnesses can be prevented if the Three Cs of food safety are followed.

- **Clean** - Good housekeeping, proper personal hygiene and sanitation of equipment and utensils will keep the food preparation, storage and meal service areas clean.
- **Cold** - Storing food at the right temperature stops the growth of bacteria and other microorganisms. Although microorganisms can survive in the refrigerator or freezer, they generally cannot reproduce at temperatures below 40°F.
- **Cooked** - Bringing foods to a high internal temperature while cooking (165°–180°F depending on the food) and holding cooked foods at a high temperature (140°F) will keep them safe.



Consult your State or local health department for possible variations in temperature guidelines.



## Food Service Hazards

Food service kitchens are full of potential dangers for both employees and the people they serve. Foodborne illness is just one potential hazard. Pest problems, chemical contamination, physical contamination and on-the-job injuries are also hazards. It is important for food service workers to be aware of these hazards so steps can be taken to prevent them.

Pest problems occur because roaches, flies and rodents like to live where food is stored, prepared or served.

Chemical contamination occurs when chemicals used for cleaning, sanitizing and pest control are inappropriately stored.

Food becomes physically contaminated when dirt, hair, nail polish, broken glass, metal fragments and bits of packaging material come in contact with food.

On-the-job injuries, such as burns, strains, cuts, slips and falls, are common accidents that can occur in the kitchen.



## Hazard Analysis of Critical Control Points (HACCP)

HACCP is a system for monitoring the food service process to reduce the risk of foodborne illness. It involves taking a look at the food handling practices as food flows through the food service operation, all the way from purchasing through serving.

A critical control point is any step, place, or procedure in a food's production where food safety hazards can be controlled or prevented. Critical control points are purchasing, receiving, storing, preparing, cooking and holding, cooling and reheating. Failure to take appropriate action at these critical control points could result in foodborne illness. Critical control points and steps food service workers can take to ensure food safety are included in this lesson.

## Purchasing, Receiving and Storing Food

Examine all foods when delivered to make sure they are not spoiled, dirty or contaminated. Make sure frozen food is frozen when delivered. Do not accept frozen food that has thawed.

Refrigerate food immediately. Do not let refrigerated or frozen foods sit at room temperature.

Use foods on a "first-in, first-out" basis to prevent spoilage and food waste.

Store foods, such as flours, cereals, cornmeal, sugar, dry beans and dry peas in tightly covered containers to prevent rodent and insect infestation.





## Preparing and Cooking Food



Do not allow people with infected cuts or sores, colds or other communicable diseases to prepare or serve food.

Wash hands thoroughly with soap and water before handling foods or utensils. Repeat after every visit to the restroom.

Wash hands, utensils and work surfaces thoroughly after contact with raw eggs, fish, meats or poultry.

Thoroughly wash all fruits and vegetables that will be served raw, such as lettuce, celery, carrots, apples and peaches.

Cook foods properly, following standardized procedures and recipe directions.

Do not overload containers when heating food. Use small, shallow pans so food will heat quickly.

## Serving and Holding, Cooling and Reheating Food

Remember to keep hot food hot and cold food cold. Discard any food held at room temperature for more than 2 hours.

Cool foods quickly using small, shallow pans.

Throw out foods that are put on children's plates but not eaten.

Reheat foods to an internal temperature of 165°F.

## Utensils and Equipment

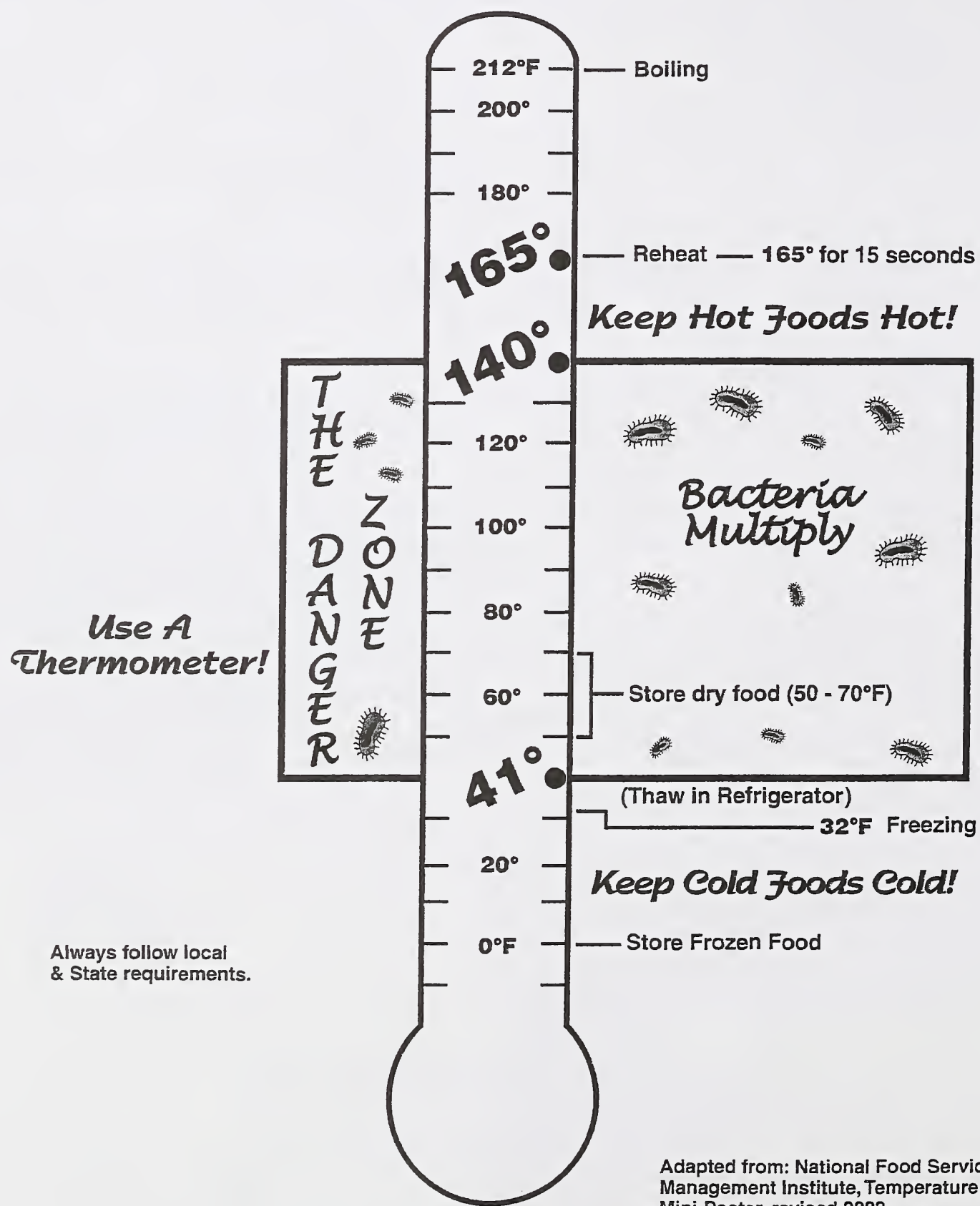
All eating and drinking utensils must be properly handled. Utensils used for cooking should never be used for tasting. Also, cracked or chipped utensils should not be used. All appliances and equipment should be kept clean and in good working condition. Use only dish washing equipment that meets local health agency standards.



If in doubt, throw it out.



Follow these guidelines to keep food safe.





## Ways to Recognize Food Spoilage

These Foods:	Are Risky When:
Fresh Poultry	Stored raw in the refrigerator for longer than 1-2 days (3-4 days when cooked). Left unrefrigerated for more than 2 hours either before or after cooking.
Fresh Meat	Stored raw in the refrigerator for longer than 3-4 days (1-2 days for hamburger). Discolored, smelly or slimy. Left unrefrigerated for more than 2 hours either before or after cooking.
Fresh Fish	Stored for longer than 1-2 days in the refrigerator. Dried at edges; smelly. Left unrefrigerated for more than 2 hours either before or after cooking.
Milk, Cream, Egg Products	Left unrefrigerated for more than 2 hours.
Frozen Meats, Poultry, Fish or Casseroles	Thawed at room temperature. Thawed, refrozen and thawed again. Eaten without thorough cooking.
Canned Foods  Home canned foods should never be served in child care centers or day care homes.	Liquid spurts out when can is opened. Can is corroded, rusty, leaky, swollen on top or bottom or dented on side seams. Contents have off-odors or a foamy or mushy texture. Stored at hot temperatures or allowed to freeze and thaw.
Fresh Fruits or Vegetables	Unwashed, moldy, soft or discolored.
Bread Products	Moldy. Infested with insects.













# Serving Cultural Foods

## Considering Cultural Differences

The United States of America is a land of people with diverse cultural and ethnic backgrounds. People from a given culture or ethnic group tend to have experiences that are similar in nature, although not identical. There are variations within each group depending on socioeconomic status, social class, religion, age, education, location, and the length of time family members have lived in the United States.

Cuisines of a country are especially influenced by the country's geography, climate and history. People of different countries and in some cases, different regions, have their own unique and customary foods and ways of combining the foods into meals.

As cultural and ethnic diversity in the United States increases, it is more likely that child care providers will be faced

with the challenge of providing meals and nutrition education to persons of cultures that may be quite different from their own.

This section is intended to stimulate awareness of, respect for, and acceptance of various cultural groups. It is not intended to stereotype persons or imply that all people from the same cultural or ethnic group are identical. Typical foods and traditional meal patterns of many countries are provided. These lists are not comprehensive. Examples of foods are provided to show the importance of cultural sensitivity and to help persons recognize foods which may be common to a particular group.

Parents and community groups are excellent sources for information on cultural values and eating habits. A list of references is also included in this section.





## Australia



Traditional Australian cuisine is an adaptation of British cuisine. The most popular breakfast is muesli, a combination of fruit, cereal and nuts. It is often served with toast and a beverage.

Pasties are "fast food" for Australians and are ideal for a quick lunch. These hot meat pies are made of dough and stuffed with meat and vegetables.

The tradition of afternoon tea at 4 p.m. continues in Australia. Tea is usually served with sandwiches, scones (biscuits), cookies and cakes.

Dinner is usually the largest meal of the day. In Australia, an entree means a dish served before the main course. An entree may be a small serving of fish or a small serving of pasta. The main course is usually a larger portion of meat or fish served with vegetables. Fruit salad or stewed fruit are favorites for dessert.

## Brazil

Just like many people in the United States, Brazilians start their day with steaming hot coffee. For breakfast, milk coffee is usually served with fresh fruit and biscuits or bread. During the day, Brazilians may drink up to twenty or more tiny thimblefuls of coffee at one of the many small coffee stands throughout the country.

Both lunch and dinner are large meals, however, dinner is served late in the day.



Beans are very popular in Brazil and are served often. Traditional dishes include black beans, white rice, and shredded greens served with steak, chicken or fish.

Chocolate is a favorite of Brazilians and is frequently served as hot chocolate or used in desserts.





## China

In China, there is no main dish. Meals, according to the Chinese tradition, are prepared so that there is a balance of taste, aroma, texture, appearance and nutritional value. Each dish in a meal is very important as it helps to create the balance.



The Chinese eat three meals and snack throughout the day on light foods, such as hard-boiled eggs, fruit, nuts or almond cookies. Tea is served before and after meals as well as with snacks. Soup is served as a beverage during meals.

In south China, breakfast may include hot congee, which is a rice porridge, with a few salty and pickled side dishes, such as vegetables or hard-boiled eggs. In north China, noodles are preferred.

Lunch and dinner may consist of soup, fish or meat, vegetables, rice and mantou, a steamed bread. Cakes and pastries are served for dessert on special occasions.

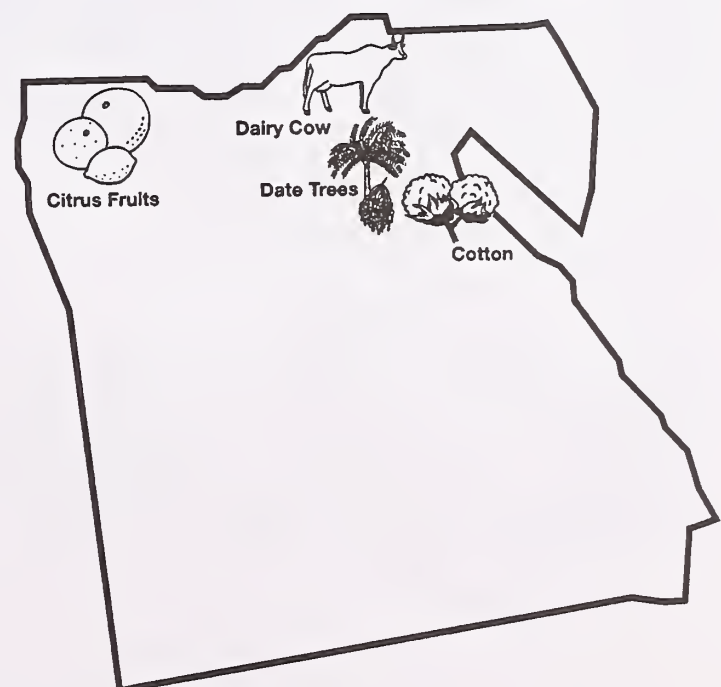
## Egypt

Fava beans and aiysh baladi (pita bread) are eaten with almost every meal in Egypt. The bread is used to scoop or hold food.

Lunch traditionally includes beans, cheese, tomatoes, onions and bread. Rice, meat (usually lamb), vegetables, beans and bread are eaten for dinner. Dessert may be thickened rice pudding or bread soaked in sugar syrup and then baked until it resembles a cake.

Falafel and humus are popular Egyptian dishes. Falafel is fried ground chickpeas and herbs, generally served in pita bread with sauce. Humus is a chickpea dip that combines beans and yogurt.

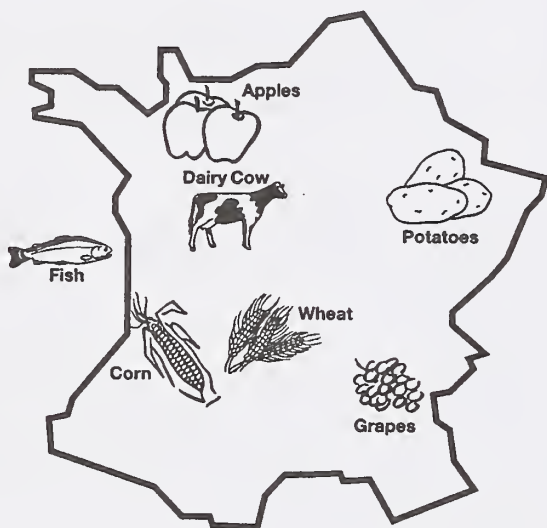
In Egypt, nuts and seeds are ground and used to thicken various dishes. Sesame paste, eggplant, lemon, garlic and olive oil are mixed together to make baba ghanoug, which is eaten as a spread.







## France



Meals in France reflect ceremony and tradition. Meals vary greatly from one region to another because of local climates and soil conditions.

Breakfast usually consists of baguettes (crusty bread) or croissants. They are often served with jam or jelly. Either café au lait or hot chocolate is also served.

Lunch is the main meal of the day. It may begin with soup or an hors d'oeuvre, such as an egg or cheese dish. Meat, potatoes and a vegetable are also served. If salad is served, it is eaten after the main dish to cleanse the palate. French pastries are sometimes eaten as afternoon snacks.

A traditional dinner is much like lunch, except that it is smaller and eaten later in the day. Dinner usually includes soup, quiche, cold meats and cheeses. Fruit and cheese are eaten as dessert.

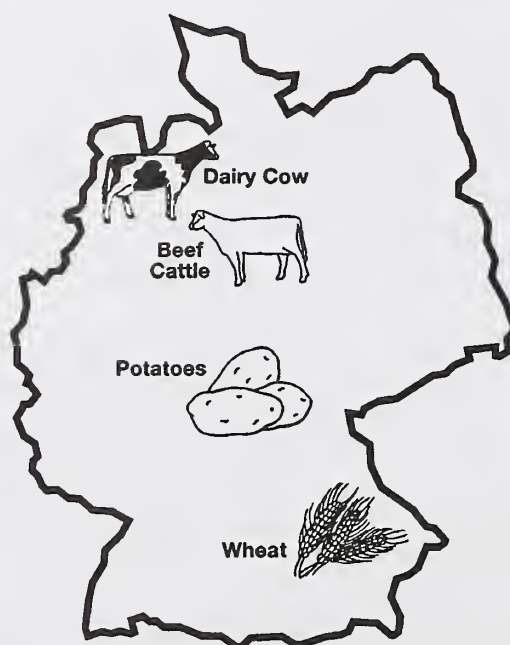
## Germany

The traditional German breakfast features crunchy rolls with butter and jam or honey.

The main meal is eaten at noon and usually includes roasted meat, such as pork, served with potatoes or dumplings topped with gravy, and vegetables. Soup is sometimes served as an appetizer.

Supper is eaten in the evening. It may include bread with butter and cheese, cold cuts or sausage. Cheese with strong flavors, such as Limburger, is popular. Quark is German cottage cheese. Sausages or wursts, including liverwurst, blutwurst, bratwurst, white wurst and frankfurters are popular.

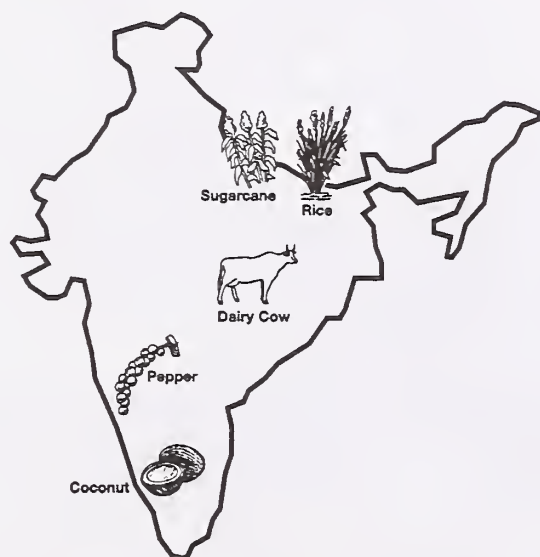
Pudding with whipped cream or tortes (rich cakes) may be eaten for dessert.





## India

Meals in India are greatly influenced by religion, caste (social position) and agricultural region. Rice and wheat dishes with curry seasonings are featured at most Indian meals. In addition, several condiments are generally served. The condiments provide a variety of different taste sensations: sweet, salty, sour and bitter.



Breakfast may consist of coffee or tea made with milk and sugar, rice, bread, a pickled fruit or vegetable and cooked cereal.

An afternoon snack is usually served along with tea or coffee. The evening meal is the main meal and may be served with rice, a curried vegetable, a legume or meat dish, hot bread and raitas (a combination of yogurt, seasonings and fruits or vegetables).

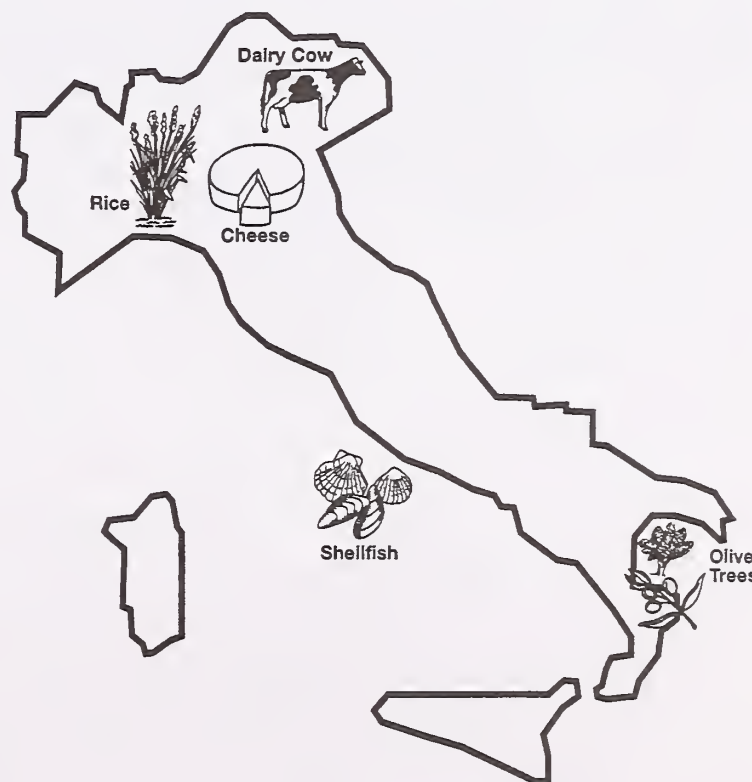
Because India has a large population of vegetarians, milk, yogurt and cheese are often used in cooking to provide a major source of protein.

## Italy

Pasta and cheese are staples in Italy. There are more than 100 different types and shapes of pasta.

A traditional Italian breakfast is usually bread with coffee and hot milk. Crusty bread is part of all meals.

The afternoon meal is the most formal meal and features several courses. It usually begins with antipasto (an appetizer of salads, pickled vegetables, cheeses, cold meat and fish). This is followed by soup or pasta. Pasta may be served with or without sauce or stuffed with meat and cheese. The main dish is served next and is usually fish, pork or chicken and vegetables. Cheese and fruit are generally served for dessert. The evening meal is usually light.





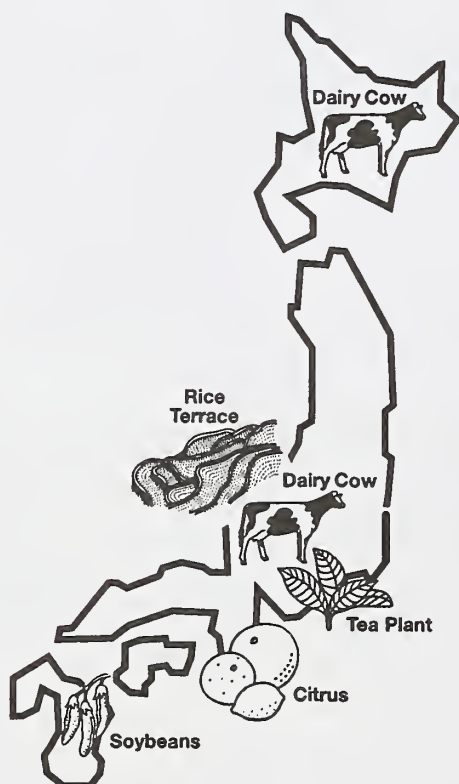


## Japan

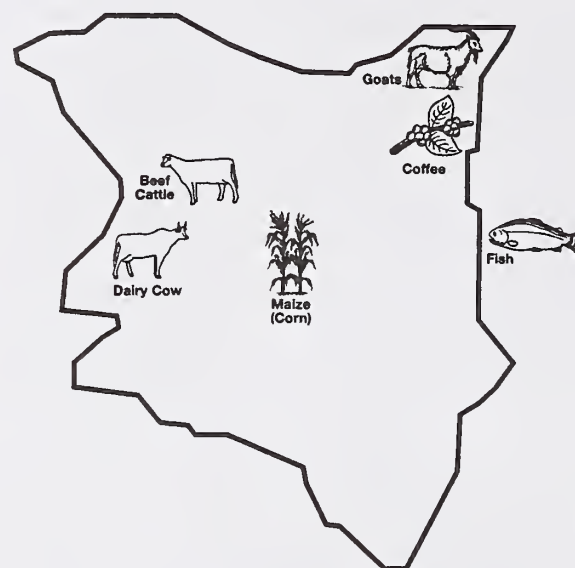
Traditionally, the Japanese eat three meals a day plus a snack. Rice is the most important part of each meal. Fish and vegetables are also important to Japanese meals. Fish may be eaten raw, sun dried, broiled, fried or cooked with soup. Seafood or seaweed is often made into a stock, which is used in many different dishes.

Typical meals in Japan may contain rice, a form of soybeans, such as tofu, fish, seaweed and pickled vegetables. Cabbage, cucumber, eggplant, and radishes are the vegetables most often served pickled in Japanese cuisine. Dessert is usually fresh fruit, a light gelatin or ice cream.

Noodles are also served often in Japan. Soba noodles are made of buckwheat flour and udon noodles are made of wheat flour.



## Kenya



Meals in Kenya vary from region to region because of the many different ethnic groups.

Breakfast may consist of chai (tea made with milk and sugar) and bread. Milk is also used to make uji (a cereal beverage).

Lunch and dinner may feature irio (a mashed green pea mixture with corn and potatoes) or ugali (a thick porridge made from corn flour). Ugali is a staple food and is used similarly to bread, potatoes or pasta. It is usually rolled into a small ball and used as a scoop for food. Maize (corn) is also a staple. Charcoal roasted corn is a popular snack.

Bananas are used in almost every type of dish. Approximately 30 varieties of bananas are available, including tiny sweet bananas, large yellow and green bananas, and fat red bananas with a tangy lemon flavor.





## Mexico

Traditionally, a typical morning in Mexico includes two breakfast meals. The first one is early in the morning and includes a variety of sweetened breads with cafe con leche (coffee with milk) or hot chocolate. At the second breakfast, fruits or fruit juice, huevos revueltos (scrambled eggs), beans, chile sauce, tortillas and cafe con leche are served.



The mid-day meal is the main meal. For some people, the meal may include stew, beans and tortillas. For other people, it may consist of several different courses, including rice or pasta, a main course of meat or fish, and a green salad or vegetable. Salsa, tortillas and bolillos (rolls) are always on the table.

Desserts are an important part of the Mexican meal and may include a fried pastry called bunuelos or rice pudding.

The evening meal is very light and usually consists of sweetened bread and jams with cafe con leche, hot chocolate made with milk, or atole (a hot cornmeal drink).

## Russia

Like many other countries, Russia's meals vary greatly from region to region because of climate. In some areas, fresh fruits and vegetables are not readily available during the winter.

Breakfast may consist of bread served with butter and jam. Soft-boiled eggs, cheese and ham are also eaten.

Lunch and dinner feature several courses. The first course is cold and warm appetizers. Next, a big bowl of soup is served. In winter it is a chunky meat or fish soup, and in summer, a cold borscht or vegetable soup. A pirog (meat pie) always accompanies the soup. The main course may be a fish dish, chicken cutlets, meatloaf filled with eggs and scallions, or ground meat and rice wrapped in cabbage leaves and simmered in tomato sauce.

Popular desserts include sweet yeast dough filled with fruit and sour cream, tart or sour cream cake, or a 'Russian-style' Napoleon with ten layers of pastry drenched in custard.





## Sweden

For many people in Sweden, breakfast consists of coffee or tea, bread, butter and cheese. Cereal with milk or yogurt also may be served.

Lunch and dinner are large meals. However, lunch is considered the main meal of the day and is eaten around noon.

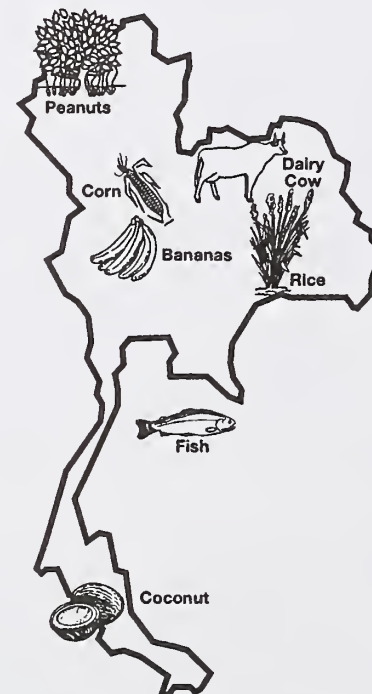
Sweden is famous for its smorgasbord, a table full of appetizers, meat, fish and cheese dishes. Smorgasbord etiquette requires that at least three trips are made to the table so the flavors of different foods are not mixed. Rice pudding is a popular dessert found on the smorgasbord.



Berries are a popular fruit in Sweden. Strawberries, cloud berries, lingonberries, blueberries and raspberries are eaten fresh, made into jams and served with cakes. Swedish pancakes served with whipped cream and berries are especially popular.

## Thailand

Like meals in China, meals in Thailand have no main dish. All dishes are equally important. Thai meals are usually served with a variety of condiments and sauces. Traditionally, the Thai eat when they get hungry and snack five to six times a day. Snacks include fruits, soups and sweets and are often purchased from street vendors. Vendors also provide noodle dishes for a quick, satisfying lunch.



A typical breakfast may include bland rice soup, boiled eggs, fried rice and leftovers from the previous night's dinner.

Lunch and dinner may consist of noodles or rice, soup, vegetables, and meat, chicken or seafood.

Dessert is typically a plate of fresh tropical fruit. On special occasions, sweets made from sticky rice, agar-agar (seaweed gelatin) or coconut milk and cream may be served.





## U.S.A.



As in other large countries, meals in the U.S.A. are both ethnically and regionally diverse. Americans typically eat three meals a day with snacks in between. Snacks may include fruit, chips, popcorn and cookies.

Breakfast is usually hot or cold cereal and milk. Pancakes, sausage, eggs, bacon and toast are also favorites.

Lunch is often eaten away from home. Sandwiches made with thinly sliced meat, cheese and vegetables, or peanut butter and jelly are common. Hamburgers, fried chicken or fish sandwiches, and tacos are favorites from fast food restaurants and are popular choices for people who work.

Dinner is the main meal of the day and traditionally includes meat, chicken or fish with potatoes or rice and a vegetable. Dinner is usually followed by a sweet dessert, such as ice cream, cake, pie or frozen yogurt.

## Holidays

Celebrating holidays throughout the year is a wonderful way to increase children's understanding of different cultures. Ethnic foods, music, clothing, books and videos can be part of celebrations. Holidays that can be observed include:

### January/February

Chinese New Year (January)  
Martin Luther King, Jr. Day (January)  
Black History Month (February)

### March/April

St. Patrick's Day (Irish holiday, March 17)  
Passover (Jewish holiday)  
Easter (Christian holiday)

### May/June

Asian American Month (May)  
Cinco de Mayo (Mexican holiday, May)  
African American Independence Day  
(June 19)

### July/August

Canada Day (July 1)  
Independence Day (American holiday, July 4)  
Bastille Day (French holiday, July 14)

### September/October

Mexican Independence Day (September 16)  
Hispanic American Month  
(September 15 - October 15)  
American Indian Heritage Month (October)  
Mexican Heritage Day (October 12)

### November/December

Dia de los inocentes, "Day of the Children"  
(Hispanic holiday, November 2)  
Thanksgiving (American holiday, November)  
Christmas (Christian holiday, December 25)  
Hanukkah (Jewish holiday, December)  
Kwanzaa (African American holiday)





## References and Resources

*Ethnic and Regional Food Practices: Chinese American.* American Dietetic Association and American Diabetes Association.

*Ethnic and Regional Food Practices: Hmong American.* American Dietetic Association and American Diabetes Association.

*Ethnic and Regional Food Practices: Jewish.* American Dietetic Association and American Diabetes Association.

*Ethnic and Regional Food Practices: Mexican American.* American Dietetic Association and American Diabetes Association.

*Ethnic and Regional Food Practices: Navajo.* American Dietetic Association and American Diabetes Association.

Brown, L.K., and Mussell, K., *Ethnic and Regional Foodways in the United States.* Knoxville, Tennessee: The University of Tennessee Press, 1984.

Bryant, C.A., et al., *The Cultural Feast - Introduction to Food and Society.* St. Paul, Minnesota: West Publishing Company, 1985.

Cooper and Ratner, *Many Friends Cooking.* Unicef. Philomel Books, 1980.

*Foods Around the World.* Dairy Council of Wisconsin, 1997.

Kittler, P. and Schuer, K., *Food and Culture in America.* New York: Van Nostrand and Reinhold, 1989.

Information for the countries and the maps were adapted from *Foods Around the World*, Dairy Council of Wisconsin.











# Evaluating Recipes

*This section is intended to be a resource for Child and Adult Care Food Program personnel who desire detailed information on evaluating recipes for crediting purposes.*

## Tips for Evaluating a Recipe

To determine whether a recipe can be credited and how it contributes to the meal pattern, the recipe must provide specific information about its ingredients. For example, a recipe should state:

- 1-15 oz can of fruit cocktail, not 1 can of fruit cocktail
- 3 cups cooked rice, not 3 cups rice
- ½ cup finely or coarsely chopped onions, not 1 small onion

## Abbreviations

tsp or t . . . . .	teaspoon
Tbsp or T . . . . .	tablespoon
c . . . . .	cup
oz. . . . .	ounce
fl oz. . . . .	fluid ounce
lb or #. . . . .	pound
pt . . . . .	pint
qt . . . . .	quart
gal . . . . .	gallon
wt. . . . .	weight
No. . . . .	number
pkg . . . . .	package
°F. . . . .	degrees Fahrenheit
g . . . . .	gram
mg . . . . .	milligram
L . . . . .	liter
mL . . . . .	milliliter

## Common Measures and Equivalents

3 tsp = 1 T	16 oz = 1 lb
2 T = 1/8 c	1 lb = 454 g
4 T = 1/4 c	2 c = 1/2 qt
5-1/3 T = 1/3 c	4 c = 1 qt
8 T = 1/2 c	8 c = 1/2 gal
16 T = 1 c	1 pt = 2 c
1 oz = 28.3 g	2 pt = 1 qt
4 oz = 1/4 lb	2 qt = 1/2 gal
8 oz = 1/2 lb	4 qt = 1 gal
12 oz = 3/4 lb	

On the following pages is a table of weights of one cup of commonly used ingredients. This chart is helpful for determining the crediting of many homemade foods. To find the weight of a fraction of one cup, follow the directions in the table below.

Multiply the weight of one cup by:	To find the weight of:
0.75	3/4 cup
0.66	2/3 cup
0.50	1/2 cup
0.33	1/3 cup
0.25	1/4 cup
0.12	1/8 cup



### Weights of One Cup of Commonly Used Ingredients

The use of company or product names does not imply approval or endorsement of products by the USDA.  
Product names are given only for clarification.

Food Item	Type	Weight of One Cup (grams)
barley	uncooked	195
	cooked	162
breadcrumbs	fine, dry	107
	soft	43
bulgur	uncooked	140
	cooked	182
cereals	all-bran	61
	bran buds	75
	Cheerios™	28
	corn chex	29
	corn flakes, crushed	80
	corn flakes, whole	29
	puffed rice	13
	rice chex	33
	rice krispies	27
	wheaties	32
cornmeal, enriched, uncooked	yellow, degerminated	151
	yellow, stone-ground	132
cracker crumbs	graham	84
	snack, round	80
flour, cake	unsifted, dipped	119
	unsifted, spooned	111
	sifted, spooned	99
flour, rice, brown	unsifted, spooned	158
flour, rice, white	unsifted, spooned	149
flour, rye, dark	unstirred, spooned	128
	stirred, spooned	127



## Weights of One Cup of Commonly Used Ingredients

The use of company or product names does not imply approval or endorsement of products by the USDA.  
Product names are given only for clarification.

Food Item	Type	Weight of One Cup (grams)
flour, rye, light	unstirred, spooned	101
	stirred, spooned	88
flour, wheat, all-purpose	unsifted, dipped	143
	unsifted, spooned	126
	sifted, spooned	116
flour, wheat, bread	unsifted, dipped	136
	unsifted, spooned	123
	sifted, spooned	117
flour, wheat, self-rising	unsifted, dipped	130
	unsifted, spooned	127
	sifted, spooned	106
flour, whole-wheat	stirred, spooned	120
germ, wheat	spooned	115
oat bran*	raw	93
	cooked	220
oats, rolled, quick	uncooked	73
	ground	109
oats, rolled, regular	uncooked	75
wheat bran*	untoasted	60
	toasted	84

Taken from: *Average Weight of a Measured Cup of Various Foods*, Home Economics Research Report No. 41, USDA.

\*Pennington, Jean A. T. *Food Values of Portions Commonly Used*, Sixteenth Edition, 1994.







## Determining the Number of Grains/Breads Servings in a Recipe

Determining the number of grains/breads servings in a recipe is an important step in assuring that the meals you serve are nutritious and meet Federal meal pattern requirements. One serving of grains/breads must contain **14.75 grams** of whole-grain meal, bran, germ or enriched flour. For crediting other types of dry, whole-grain cereal in a recipe, **25 grams** is used as the equivalent of one grains/breads serving.

To determine the number of grains/breads servings in a recipe, follow the steps below. On the next page, there is an example recipe that was evaluated following these steps.

1. Under Ingredients-A, list any oatmeal, cornmeal, whole-grain bran, germ or enriched flour used in the recipe. List the quantity of these ingredients under Quantity. Use the chart on page 1 in this section to convert fractions to decimal values.
2. Under Ingredients-B, list any other dry, whole-grain cereal ingredients used in the recipe. List the quantity of these ingredients under Quantity. Use the chart on page 1 in this section to convert fractions to decimal values.
3. Use the chart, "Weights of One Cup of Commonly Used Ingredients," from this section to determine the gram weight of each ingredient listed. Record this under Grams Per Cup.
4. Multiply the Quantity (1 and 2) by the Grams Per Cup (3) to determine the Total Gram Weight of the ingredients.
5. Divide the Total Gram Weight (4) by the factor indicated to determine the Grains/Breads Contribution.
6. Add all values under Grains/Breads Contribution (5) to determine the Total Grains/Breads Contributions.
7. Divide the Total Grains/Breads Contributions (6) by the number of servings in the recipe to determine the Grains/Breads per Serving of Recipe. Round down to the nearest  $\frac{1}{4}$  of a serving (7).

Ingredients-A	Quantity		Grams Per Cup		Total Gram Weight		Grains/Breads Contribution
<u>(1)</u>	<u>(1)</u>	x	<u>(3)</u>	=	<u>(4)</u>	÷ 14.75 =	<u>(5)</u>
<u>(1)</u>	<u>(1)</u>	x	<u>(3)</u>	=	<u>(4)</u>	÷ 14.75 =	<u>(5)</u>
<u>(1)</u>	<u>(1)</u>	x	<u>(3)</u>	=	<u>(4)</u>	÷ 14.75 =	<u>(5)</u>

Ingredients-B	Quantity		Grams Per Cup		Total Gram Weight		Grains/Breads Contribution
<u>(2)</u>	<u>(2)</u>	x	<u>(3)</u>	=	<u>(4)</u>	÷ 25 =	<u>(5)</u>
<u>(2)</u>	<u>(2)</u>	x	<u>(3)</u>	=	<u>(4)</u>	÷ 25 =	<u>(5)</u>
<u>(2)</u>	<u>(2)</u>	x	<u>(3)</u>	=	<u>(4)</u>	÷ 25 =	<u>(5)</u>

Total Grains/Breads Contribution (6)  
÷ Total Number of Servings         
Grains/Breads Per Serving of Recipe (7)



## Evaluating Oatmeal Raisin Cookies

3/4 cup sugar  
 2 Tbsp margarine or butter  
 1 large egg  
 2 Tbsp low-fat milk  
 1/4 cup canned applesauce  
 3/4 cup all-purpose flour  
 1/4 tsp baking soda  
 1/2 tsp ground cinnamon  
 1/8 tsp ground nutmeg  
 1 1/4 cups quick oats  
 1/2 cup raisins

1. Cream sugar and margarine or butter until smooth.
2. Slowly add egg. Mix on medium speed for one minute.
3. Add milk and applesauce. Mix for one minute.
4. In a small bowl, combine flour, baking soda, cinnamon and nutmeg.
5. Gradually add dry ingredients to the creamed mixture. Mix on low speed.
6. Portion dough by rounded spoonfuls onto a lightly greased cookie sheet.
7. Bake for 10-13 minutes until lightly browned. Cool on a wire

1. Under Ingredients-A, list any oatmeal, cornmeal, whole-grain, bran, germ or enriched flour used in the recipe. List the quantity of these ingredients under Quantity. Use the chart on page 1 in this section to convert fractions to decimal values.
2. Under Ingredients-B, list any other dry, whole-grain cereal ingredients used in the recipe. List the quantity of these ingredients under Quantity. Use the chart on page 1 in this section to convert fractions to decimal values.
3. Use the chart, "Weights of One Cup of Commonly Used Ingredients," from this section to determine the gram weight of each ingredient listed. Record this under Grams Per Cup.
4. Multiply the Quantity (1 or 2) by the Grams Per Cup (3) to determine the Total Gram Weight of the ingredients.
5. Divide the Total Gram Weight (4) by the factor indicated to determine the Grains/Breads Contribution.
6. Add all values under Grains/Breads Contribution (5) to determine the Total Grains/Breads Contributions.
7. Divide the Total Grains/Breads Contributions (6) by the number of servings in the recipe to determine the Grains/Breads per Serving of Recipe. Round down to the nearest 1/4 of a serving (7).

Ingredients-A	Quantity		Grams Per Cup		Total Gram Weight		Grains/Breads Contribution
<u>flour</u> (1)	<u>.75 cup</u> (1)	x	<u>126</u> (3)	=	<u>94.5</u> (4)	÷ 14.75 =	<u>6.4</u> (5)
<u>oatmeal</u> (1)	<u>1.25 cups</u> (1)	x	<u>73</u> (3)	=	<u>91.25</u> (4)	÷ 14.75 =	<u>6.2</u> (5)
<u>          </u> (1)	<u>          </u> (1)	x	<u>          </u> (3)	=	<u>          </u> (4)	÷ 14.75 =	<u>          </u> (5)
Ingredients-B	Quantity		Grams Per Cup		Total Gram Weight		Grains/Breads Contribution
<u>          </u> (2)	<u>          </u> (2)	x	<u>          </u> (3)	=	<u>          </u> (4)	÷ 25 =	<u>          </u> (5)
<u>          </u> (2)	<u>          </u> (2)	x	<u>          </u> (3)	=	<u>          </u> (4)	÷ 25 =	<u>          </u> (5)
<u>          </u> (2)	<u>          </u> (2)	x	<u>          </u> (3)	=	<u>          </u> (4)	÷ 25 =	<u>          </u> (5)
Total Grains/Breads Contribution							<u>12.6</u> (6)
÷ Total Number of Servings							<u>24</u>
Grains/Breads Per Serving of Recipe							<u>.5</u> (7)

*One cookie provides 1/2 grains/breads serving for ages 6-12 or 1 grains/breads serving for ages 3-5.*





## Recipe Analysis

The following worksheet was used to determine the crediting and yield of a chili mac recipe for children three through five years of age. A blank worksheet appears on the next page.

Ingredients	Amount	Meat/Meat Alternate	Fruit/ Vegetable (1/4 cup)	Grains/Breads (½ slice bread or equivalent)	Milk (served as a beverage)
<i>ground beef</i>	<i>1 pound</i>	<i>11.5 ounces</i>			
<i>elbow macaroni</i>	<i>8 ounces</i>			<i>19</i>	
<i>tomato sauce</i>	<i>2-8 ounce cans</i>		<i>7.6</i>		
<i>cheese, grated</i>	<i>½ cup</i>	<i>2 ounces</i>			
<i>green pepper, chopped</i>	<i>1/4 cup</i>		<i>1</i>		
<i>onion, chopped</i>	<i>1/4 cup</i>		<i>1</i>		
	Total	<i>13.5 ounces</i>	<i>9.6</i> <i>1/4 cup servings</i>	<i>19 servings</i>	
	Calculations	<i>13.5 ÷ 1.5 = 9</i>			
	Number of Servings (3-5 year olds)	<i>9</i> <i>1-1½ ounce servings</i>	<i>9</i> <i>1/4 cup servings</i>	<i>19 half slice</i> <i>equivalents</i>	

### Instructions:

1. List all the ingredients in the left hand column and the amount of each ingredient in the second column.
2. Find meat/meat alternate and fruit/vegetable ingredients under Common Food Yields in this section or in the Food Buying Guide for Child Nutrition Programs 2001 (PA-1331). Record the yield of meat/meat alternate in ounces and the yield of fruit/vegetable in 1/4 cup servings. Determine the yield of grains/breads using the chart in the Crediting Foods section or follow the steps outlined in Determining the Number of Grains/Breads Servings in a Recipe found in this section. Record the yield of grains/breads in ½ slice bread equivalents.
3. Determine the number of 1.5 ounce meat/meat alternate servings for children 3-5 years old by dividing the total by 1.5. Divide the total by 2 to find number of 2 ounce servings provided for children 6-12 years old.
4. Round the total for fruit/vegetables and grains/breads down to the nearest whole number of servings.

**It is recommended that recipes that include foods from more than two food groups be credited for no more than two different meal components.**

**Crediting meat/meat alternate and fruit/vegetable:** The maximum number of servings that can be provided is nine because the recipe yields nine servings of meat/meat alternate and fruit/vegetable.

**Crediting meat/meat alternate and grains/breads:** The maximum number of servings that can be provided is nine because the recipe yields nine servings of meat/meat alternate.

**Crediting fruit/vegetable and grains/breads:** The maximum number of servings that can be provided is nine because the recipe yields nine servings of fruit/vegetable.





-



## Common Food Yields

The following are common ingredients used in recipes served in day care homes and child care centers. Yields and servings correspond to required amounts for 3-5 year olds for lunch or supper. Number of servings is rounded down to the nearest whole number.

Meat/Meat Alternates			
Meat/Meat Alternate	Amount as Purchased	Yield after Preparation	Number of 1.5 ounce Servings or Equivalent
beef, ground (no more than 26% fat)	1 pound	11.5 oz	7
cheese	1 pound	16 oz	10
cheese spread, processed cheese food	1 pound	16 oz (2 oz = 1 oz meat alt)	5
chicken, boneless	1 pound	11.2 oz	7
chicken with bone	1 pound	7.04 oz	4
cottage cheese	1 cup	1 cup	2 (3/8 cup)
dry beans	1 pound	5.9 cups	15 (3/8 cup)
ham, boneless	1 pound	9.28 oz	6
pork, ground (no more than 26% fat)	1 pound	11.5 oz	7
tuna	1 - 6.0 oz can	5.26 oz	3
turkey, ground	1 pound	11.2 oz	7

Grains/Breads		
Grains/Breads	Amount Uncooked	Number of 1/4 Cup Servings
egg noodles, uncooked	1 pound	40 (cooked)
elbow macaroni, uncooked	1 pound	39 (cooked)
lasagna noodles, uncooked	1 pound	28 (cooked)
rice, uncooked (white, enriched)	1 cup dry = 3.25 cups cooked)	13
rice, uncooked (white, enriched)	1 pound dry = 7.5 cups cooked)	30
spaghetti, uncooked	1 pound	21 (al dente)



Vegetables		
Vegetable	Amount Raw	Number of 1/4 Cup Servings
broccoli, fresh or frozen	1 pound	9
carrots	3 sticks (4" x 1/2")*	1
celery, fresh	1 pound, chopped 3 sticks (1/2" x 4")*	12 1
corn, canned, whole kernel (liquid pack, drained)	15 1/4 oz (No. 300 can) 106 oz (No. 10 can)	5 40
corn, frozen, whole kernel	1 pound	11
cucumber, fresh	4 slices (1/8" thick)*	1
green beans, canned, cut, drained, heated	14 1/2 oz (No. 300 can)	5
green beans, frozen, cut	1 pound	11
kidney beans, canned	15 1/2 oz (No. 300 can)	5
lettuce, iceberg	1 piece (4-1/4" x 4-1/4")*	1
peas, canned, drained (unheated for salad)	15 1/4 oz (No. 300 can)	5
peas, frozen	1 pound	9
potatoes, fresh, white	1 pound	8
potatoes, frozen, hashed brown	1 pound	7
potatoes, frozen, tater tots or rounds	1 pound	12
tomatoes, canned	14 1/2 oz (No. 300)	6
Tomatoes, fresh, cherry	3 cherry tomatoes*	1
tomatoes, fresh	1 pound, diced 4 slices (1/8" thick)*	11 8
tomato paste	12 oz (1 T = 1/4 c sauce)	20
tomato puree	16 oz (2 T = 1/4 c sauce)	14
tomato sauce	15 oz	6
tomato soup (condensed)	1 can (10-3/4 oz)	2





## Evaluating Recipes

Fruits		
Fruit	Amount Raw	Number of 1/4 cup servings
apples, fresh	1 pound, raw, cored, peeled	11
	1 pound, raw, cored, unpeeled	14
bananas, fresh	1 pound, sliced	6
blackberries, fresh	1 pound	11
blackberries, frozen	1 pound, thawed, sugar added	9
blueberries, fresh	1 pound	11
blueberries, individual frozen	1 pound, thawed, unsweetened	11
cantaloupe, fresh, cubed or diced	1 pound	5
cherries, sweet, fresh	1 pound	8
	7 cherries*	1
cherries, frozen	1 pound	7 (drained fruit)
dates, dehydrated, pitted	1 pound	11
grapes, fresh, seedless	1 pound	10
	7 large grapes*	1
honeydew melon, fresh, cubed	1 pound	4
oranges, fresh, 138 count	1 pound	6
	1/2 orange	1
peaches, fresh	1 pound	11
	1/2 peach	1
raisins	1 pound	12
	1.3 oz - 1.5 oz package	1
raspberries, fresh	1 pound	12
strawberries, fresh	1 pound	10
strawberries, frozen	1 pound	7
watermelon, fresh	1 pound	6

\*Numbers are approximate.

Sources: Food Buying Guide for Child Nutrition Programs, 2001

Grains/Breads Instruction, FNS Instruction 783-1 Rev 2

Crediting Foods in the Child and Adult Care Food Program, USDA, Food and Nutrition Service,  
Mid-Atlantic Region, January 1998

## Child and Adult Care Food Program Meal Pattern for Children

### Breakfast for Children -- Select all three components for a reimbursable meal

Food Components	Ages 1-2	Ages 3-5	Ages 6-12 <sup>1</sup>
1 milk, fluid	1/2 cup	3/4 cup	1 cup
1 fruit or vegetable juice, <sup>2</sup> fruit and/or vegetable	1/4 cup	1/2 cup	1/2 cup
1 grains/breads <sup>3</sup> bread or cornbread or biscuit or roll or muffin or cold dry cereal or hot cooked cereal or pasta or noodles or grains	1/2 slice 1/2 serving 1/4 cup 1/4 cup 1/4 cup	1/2 slice 1/2 serving 1/3 cup 1/4 cup 1/4 cup	1 slice 1 serving 3/4 cup 1/2 cup 1/2 cup

<sup>1</sup>Children age 12 and older may be served larger portions based on their greater food needs. They may not be served less than the minimum quantities listed in this column.

<sup>2</sup>Fruit or vegetable juice must be full-strength.

<sup>3</sup>Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified.

## Child and Adult Care Food Program Meal Pattern for Children

### Snack for children -- Select two of the four components for a reimbursable snack

Food Components	Ages 1-2	Ages 3-5	Ages 6-12 <sup>1</sup>
1 milk, fluid	1/2 cup	1/2 cup	1 cup
1 fruit/vegetable juice, <sup>4</sup> fruit and/or vegetable	1/2 cup	1/2 cup	3/4 cup
1 grains/breads <sup>3</sup> bread or cornbread or biscuit or roll or muffin or cold dry cereal or hot cooked cereal or pasta or noodles or grains	1/2 slice 1/2 serving 1/4 cup 1/4 cup 1/4 cup	1/2 slice 1/2 serving 1/3 cup 1/4 cup 1/4 cup	1 slice 1 serving 3/4 cup 1/2 cup 1/2 cup
1 meat/meat alternate meat or poultry or fish <sup>4</sup> or alternate protein product or cheese or egg <sup>5</sup> or cooked dry beans or peas or peanut or other nut or seed butters or nuts and/or seeds or yogurt <sup>6</sup>	1/2 ounce 1/2 ounce 1/2 ounce 1/2 1/8 cup 1 tablespoon 1/2 ounce 2 ounces	1/2 ounce 1/2 ounce 1/2 ounce 1/2 1/8 cup 1 tablespoon 1/2 ounce 2 ounces	1 ounce 1 ounce 1 ounce 1/2 1/4 cup 2 tablespoon 1 ounce 4 ounces

<sup>1</sup>Children age 12 and older may be served larger portions based on their greater food needs. They may not be served less than the minimum quantities listed in this column.

<sup>2</sup>Fruit or vegetable juice must be full-strength. Juice cannot be served when milk is the only other snack component

<sup>3</sup>Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified.

<sup>4</sup>A serving consists of the edible portion of cooked lean meat or poultry or fish.

<sup>5</sup>One-half egg meets the required minimum amount (one ounce or less) of meat alternate.

<sup>6</sup>Yogurt may be plain or flavored, unsweetened or sweetened.

## Child and Adult Care Food Program Meal Pattern for Children

**Lunch or Supper for Children -- Select all four components for a reimbursable meal.**

Food Components	Ages 1-2	Ages 3-5	Ages 6-12 <sup>1</sup>
1 milk, fluid	1/2 cup	3/4 cup	1 cup
2 fruits/vegetables juice <sup>2</sup> , fruit and/or vegetable	1/4 cup	1/2 cup	3/4 cup
1 grains/bread <sup>3</sup> bread or cornbread or biscuit or roll or muffin or cold dry cereal or hot cooked cereal pasta or noodles or grains	1/2 slice 1/2 serving 1/4 cup 1/4 cup 1/4 cup	1/2 slice 1/2 serving 1/3 cup 1/4 cup 1/4 cup	1 slice 1 serving 3/4 cup 1/2 cup 1/2 cup
1 meat or meat alternate meat, poultry or fish <sup>4</sup> , or alternate protein product or cheese or egg or Cooked dry beans/peas Peanut butter or other nut or seed butters Nuts and/or seeds <sup>5</sup> Yogurt <sup>6</sup>	1 ounce 1 ounce 1 ounce 1/2 1/4 cup 2 tablespoons 2 Tbsp 1/2 ounce	1 1/2 ounces 1 1/2 ounces 1 1/2 ounces 3/4 3/8 cup 3 tablespoons 3 Tbsp 3/4 ounce	2 ounces 2 ounces 2 ounces 1 1/2 cup 4 tablespoons 4 Tbsp 1 ounce

<sup>1</sup>Children age 12 and older may be served larger portions based on their greater food needs. They may not be served less than the minimum quantities listed in this column.

<sup>2</sup>Fruit or vegetable juice must be full-strength.

<sup>3</sup>Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified.

<sup>4</sup>A serving consists of the edible portion of cooked lean meat or poultry or fish.

<sup>5</sup>nuts and seeds may meet only one-half of the total meat/meat alternate serving and must be combined with another meat/meat alternate to fulfill the lunch or supper requirement.

<sup>6</sup>Yogurt may be plain or flavored, unsweetened or sweetened.





# Crediting Foods

One goal of the Child and Adult Care Food Program (CACFP) is to improve the health and nutrition of children in the Program. The Program also promotes good eating habits and nutrition education. The *Food Buying Guide (FBG) for Child Nutrition Programs* is the main resource used to determine the contribution foods make toward the meal requirements. The same rules apply for foods prepared on-site or purchased commercially.

**Creditable** foods are those foods that may be counted toward meeting the requirements for a reimbursable meal. The following factors are considered when determining whether a food is creditable:

- nutrient content
- function in a meal
- regulations governing the Child Nutrition Programs (on quantity requirements and/or by definition)
- FDA Standards of Identity

- USDA standards for meat and meat products
- administrative policy decisions on the crediting of particular foods

**Noncreditable** or **other** foods are not creditable toward the meal pattern. Noncreditable foods do not meet the requirements for any component in the meal pattern. However, noncreditable foods may supply calories which help meet the energy needs of participants and may contribute additional protein, vitamins and minerals. They can be used to supplement the required meal components, to improve acceptability and to satisfy appetites.

USDA reimburses child care centers and family day care home sponsors participating in the CACFP for the meals served, not for individual foods. A meal is reimbursable if it contains foods in amounts required by the meal pattern for the specific age group. Meals that contain foods in addition to all components specified in the meal pattern are also reimbursable.





### Meeting the Meal Pattern Requirements

A meal component can consist of one or more creditable foods. For lunches or suppers served to children 3 through 5 years old:

- At least 1/4 ounce of meat/meat alternate must be served to count toward the 1.5 ounce meat/meat alternate requirement.
- At least 1/8 cup of fruit or vegetable must be served to count toward the 1/2 cup fruit and/or vegetable requirement. Any amount less than 1/8 cup is considered a garnish.
- At least 1/4 slice of bread or its equivalent must be provided to count toward the 1/2 slice equivalent grains/breads requirement.
- A full serving of milk must be served to count toward the 3/4 cup fluid milk requirement.

### Portion Sizes

Consider the serving size of menu items when planning meals to meet the meal pattern. A small amount of food can often satisfy a young child's appetite.

Some foods will meet the meal pattern requirements only when very large serving sizes are provided. When large serving sizes are needed, serve a smaller portion and supplement with another food from the same component. For example, instead of serving 3 tablespoons of peanut butter to a three year-old at lunch, serve one tablespoon of peanut butter and 1 ounce of cheese to meet the meat/meat alternate requirement.

### Combination Dishes

Dishes that contain foods from more than one food group are combination dishes. It is recommended that combination dishes be credited for only one or two meal pattern components. This is to ensure children do not go hungry when a dish is disliked. For example, if lasagna were to contribute toward the meat/meat alternate, the fruit/vegetable and the grains/breads components, and if a child disliked the lasagna, he/she would not receive a sufficient amount of food.

Prepackaged combination dishes are creditable only if (1) the food is CN labeled or (2) a product formulation sheet signed by an official of the manufacturer (not a salesperson) is on file stating the amount of meat/meat alternate, fruit/vegetable, and/or grains/breads in the product.



The following food lists include only those foods about which crediting inquiries are often made or foods that are often credited incorrectly. Use of product brand names does not constitute USDA approval or endorsement. Product names are used solely for clarification. If you have a question regarding the crediting of a particular item not listed here, contact your State agency or sponsor for information.





## Grains/Breads

CACFP regulations require that breakfast, lunch and supper contain a grains/breads serving in the amount specified for each age group served. A grains/breads item may also be served as one of the two components of a snack.

Grains/breads may be credited when the products are whole-grain, bran, germ or enriched or made with whole-grain, bran, germ and/or enriched meal or flour. If it is a cereal, the product must be whole-grain, bran, germ, enriched, or fortified. If the product is enriched, the item must meet the Food and Drug Administration's Standards of Identity for enriched bread, macaroni and noodle products, rice, cornmeal or corn grits. The grains/breads item must contain enriched flour, bran, germ and/or whole-grain as specified on the label or according to the recipe or must be enriched in preparation or processing and labeled "enriched."

The grains/breads item must serve the customary function of bread in a meal. For a lunch or supper, this means that the item must be served as an accompaniment to the main dish (i.e. dinner rolls), or as a recognizable integral part of the main dish (i.e. taco shells, pot pie crust or spaghetti).

Grains/breads items have been divided into nine groups. The required weight for each group is based on the key nutrients in one slice of bread (25 grams or 0.9 oz) or an equal amount (14.75 grams) of whole-grain, bran, germ or enriched flour. Within each group, all bread items have approximately the same nutrient and grain content in each serving. Items with fillings, toppings, etc. require larger serving sizes to meet minimum grain content. A chart classifying products by groups and crediting them according to product weights based on FNS Instruction 783-1, Rev 2, is included on the next two pages. For homemade products, serving sizes can be determined based on the grains and/or cereal content, following the steps in the section, Evaluating Recipes.

When planning menus, the practicality of the serving size for the age of the child being served should be taken into consideration. Also, it is recommended that no more than two dessert-type items be served as a snack each week. Examples of dessert-type items can be found in the grains/breads chart in this section.

State agencies and sponsors are excellent sources for additional information on the crediting of grains/breads.







## Crediting Foods

### Grains/Breads for the Child Nutrition Programs

The serving size for children ages 1-5 is 1/2.

The serving size for children ages 6-12 is 1.

#### Group A

1/4 serving = 5 grams (0.2 oz)  
1/2 serving = 10 grams (0.4oz)

3/4 serving = 15 grams (0.5 oz)  
1 serving = 20 grams (0.7 oz)

Breading Type Coating  
Bread Sticks - hard  
Chow Mein Noodles

Crackers - saltines and snack crackers  
Croutons

Pretzels - hard  
Stuffing - dry

#### Group B

1/4 serving = 6 grams (0.2 oz)  
1/2 serving = 13 grams (0.5 oz)

3/4 serving = 19 grams (0.7 oz)  
1 serving = 25 grams (0.9 oz)

Bagels  
Batter Type Coating  
Biscuits  
Breads - white, wheat, whole-  
wheat, French, Italian  
Buns - hamburger and hot dog

Crackers - graham (all shapes),  
animal crackers  
Egg Roll Skins  
English Muffins  
Pita Bread - white, wheat,  
whole-wheat

Pizza Crust  
Pretzels - soft  
Rolls - white, wheat, whole-wheat, potato  
Tortillas - wheat or corn  
Tortilla Chips - wheat or corn  
Taco Shells

#### Group C

1/4 serving = 8 grams (0.3 oz)  
1/2 serving = 16 grams (0.6 oz)

3/4 serving = 23 grams (0.8 oz)  
1 serving = 31 grams (1.1 oz)

Cookies - plain  
Cornbread

Corn Muffins  
Croissants  
Pancakes - purchased

Pie Crust - dessert pies, fruit turnovers,  
and meat/meat alternate pies  
Waffles - purchased

#### Group D

1/4 serving = 13 grams (0.5 oz)  
1/2 serving = 25 grams (0.9 oz)

3/4 serving = 38 grams (1.3 oz)  
1 serving = 50 grams (1.8 oz)

Doughnuts - cake and yeast  
raised, unfrosted

Granola Bars - plain  
Muffins (except corn muffins)

Sweet Roll - unfrosted  
Toaster Pastry - unfrosted

#### Group E

1/4 serving = 16 grams (0.6 oz)  
1/2 serving = 31 grams (1.1 oz)

3/4 serving = 47 grams (1.7oz)  
1 serving = 63 grams (2.2 oz)

Cookies - with nuts, raisins, chocolate  
pieces, and/or fruit purees  
Doughnuts - cake and yeast raised,  
frosted or glazed

French Toast  
Grain Fruit Bars  
Granola Bars - with nuts, raisins,  
chocolate pieces and/or fruit

Sweet Rolls - frosted  
Toaster Pastry - frosted



## Grains/Breads for the Child Nutrition Programs

The serving size for children ages 1-5 is 1/2.

The serving size for children ages 6-12 is 1.

### Group F

1/4 serving = 19 grams (0.7 oz)

1/2 serving = 38 grams (1.3 oz)

3/4 serving = 56 grams (2 oz)

1 serving = 75 grams (2.7 oz)

Cake - plain, unfrosted

Coffee Cake

### Group G

1/4 serving = 29 grams (1 oz)

1/2 serving = 58 grams (2 oz)

3/4 serving = 86 grams (3 oz)

1 serving = 115 grams (4 oz)

Brownies - plain

Cake - all varieties, frosted

### Group H

1 serving = 1/2 cup cooked or 25 grams (0.9 oz) dry

3/4 serving = 3/8 cup cooked or 19 grams (0.7 oz) dry

1/2 serving = 1/4 cup cooked or 13 grams (0.5 oz) dry

1/4 serving = 2 tablespoons cooked or 6 grams (0.2 oz) dry

Barley

Breakfast Cereals - cooked

Bulgur (cracked wheat)

Macaroni - all shapes

Noodles - all varieties

Pasta - all shapes

Ravioli - noodle only

Rice - enriched white or brown

### Group I

1 serving = 3/4 cup or 1 oz, whichever is less

1/2 serving = 1/3 cup or 0.5 oz, whichever is less

1/4 serving = 1/4 cup or 9 grams or 0.3 oz, whichever is less

Ready to Eat Breakfast Cereal - cold, dry





## Crediting Foods

Grains/Breads				
Creditable				
Food Item	Yes	No	Comments	Nutrition Information
bagels	X		Group B Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	Bagels are relatively low in fat and high in complex carbohydrates. Enriched bagels contain significant amounts of thiamin, riboflavin, iron and niacin. Whole-grain varieties are good sources of fiber.
banana bread	X		See: Quick bread.	
bagel chips	X		See: Chips.	
barley	X		Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
batter-type coating	X		Batters may be credited when served as a part of the main dish of the meal. Crediting is based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. It may be difficult to determine the amount of batter on products. It is recommended that another bread item be served with the meal. Group B Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	Foods with a batter-type coating may be high in fat.
biscuits	X		Homemade biscuits may be credited based on the amount of whole grain, bran, germ and/or enriched meal or flour in the recipe. For commercial biscuits, use Group B. Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	Biscuits may be high in fat.
Boston brown bread	X		See: Quick Breads.	
bread pudding	X		Bread pudding may be credited for snack only, based on the amount of whole grain, bran, germ or enriched bread in a serving.	It is recommended that no more than two dessert type items be served as a snack each week.





Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
bread (white, rye, whole wheat, pumpernickel, seven grain, Italian, Roman meal, French, etc.)	X		Breads may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial breads, use Group B. Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	Breads are excellent sources of complex carbohydrates and fiber along with thiamin, riboflavin, niacin and iron. Breads are usually low in fat.
bread sticks, hard	X		Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	
bread stuffing/dressing, dry	X		Homemade stuffing may be credited based on the amount of bread in the recipe. For commercial stuffing made from croutons or quick stuffing mixes, use Group A. Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	Bread stuffing may be high in fat depending on the recipe followed.
breadings	X		Breadings may be credited when served as a part of the main dish of the meal. Crediting is based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. It may be difficult to determine the amount of breading on products. It is recommended that another bread item be served with the meal. For commercial breadings, use Group A. Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	Breaded foods may be high in fat.
brownies, plain	X		Plain brownies may be credited for snack only, based on the amount of whole-grain, bran, germ and/or enriched meal and flour in the recipe. For commercial brownies, use Group G. Ages 1-5: one serving = 58g or 2 oz Ages 6-12: one serving = 115g or 4 oz	Since flour is not usually the main ingredient in brownies, a large serving will be needed. This may be impractical for young children.  It is recommended that no more than two dessert type items be served as a snack each week.
brownies, frosted or with fillers such as cream cheese, nuts, etc.		X		



## Crediting Foods

Grains/Breads				
Creditable				
Food Item	Yes	No	Comments	Nutrition Information
bulgur	X		Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
buns, hamburger and hot dog	X		Homemade buns may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial buns, use Group B. Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	
cake	X		Homemade cake may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial cake, unfrosted, use Group F. Ages 1-5: one serving = 38g or 1.3 oz Ages 6-12: one serving = 75g or 2.7 oz For commercial cake, frosted, use Group G. Ages 1-5: one serving = 58g or 2 oz Ages 6-12: one serving = 115g or 4 oz	Since flour is not usually the main ingredient in cake, a large serving will be needed. This may be impractical for young children.  It is recommended that no more than two dessert type items be served as a snack each week.
caramel corn		X	Popcorn does not meet the definition of grains/breads.	Popcorn is a good source of fiber.
carrot bread	X		See: Quick bread.	
cereal bars	X		See: Granola Bars.	It is recommended that no more than two dessert type items be served as a snack each week.
cereal, cooked	X		Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	





Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
cereal, dry	X		Group I Ages 1-2: one serving = 1/4 cup or 0.3 oz* Ages 3-5: one serving = 1/3 cup or 0.5 oz* Ages 6-12: one serving = 3/4 cup or 1 oz* *whichever is less	
cheese puffs	X		See: Chips.	Cheese puffs may be high in fat and salt.
chips	X		Chips made from whole-grain, bran, germ and/or enriched meal or flour are creditable using Group B. Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	Chips may be high in fat and salt.
chow mein noodles	X		Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	
cinnamon roll	X		See: Sweet Rolls	These rolls may be high in fat and sugar.  It is recommended that no more than two dessert type items be served as a snack each week.
cobbler, fruit	X		The bread portion of the cobbler is creditable for snack only, based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. See: Fruit/Vegetable section for additional crediting information.	It is recommended that no more than two dessert type items be served as a snack each week.
coffee cake	X		Homemade coffee cake is creditable for breakfast/snack only, based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. Commercial coffee cake may be credited using Group F. Ages 1-5: one serving = 38g or 1.3 oz Ages 6-12: one serving = 75g or 2.7 oz	It is recommended that no more than two dessert type items be served as a snack each week.





## Crediting Foods

Grains/Breads				
Creditable				
Food Item	Yes	No	Comments	Nutrition Information
cookies	X		Homemade cookies may be credited for snack only, based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial cookies, plain, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz For commercial cookies with nuts, raisins, chocolate pieces, peanut butter, fillings and/or fruit purees, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	It is recommended that no more than two dessert type items be served as a snack each week.
corn		X	See: Fruits and Vegetables.	Corn is considered a vegetable.
cornbread	X		Homemade cornbread may be credited based on the amount of whole-grain and/or enriched meal or flour in the recipe. For commercial cornbread, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	
corn chips	X		See: Chips.	
corn dog batter	X		See: Batter Type Coating	
corn meal	X		If corn meal is used in a recipe: Ages 1-5: one serving = 7.38g Ages 6-12: one serving = 14.75g	
corn muffin	X		Homemade corn muffins may be credited based on the amount of whole-grain and/or enriched meal or flour in the recipe. For commercial corn muffins, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	
couscous	X		See: Pasta	



Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
crackers	X		For saltine or snack crackers, use Group A. Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz For graham or animal crackers, use Group B. Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	Some crackers are high in fat and/or salt . They should be served in moderation.
cream puff shells	X		Homemade cream puff shells may be credited for snack only based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial cream puff shells, use Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz For commercial filled cream puffs, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	Cream puffs and traditional custard or cream fillings are high in fat.  It is recommended that no more than two dessert type items be served as a snack each week.
crepes	X		Homemade crepes may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial crepes, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	
crisp	X		The grains/breads portion of the crisp is creditable for snack only, based on the amount of cereal and/or whole-grain, bran, germ and/or enriched meal or flour in the recipe. See: Fruit/Vegetable section for additional crediting information.	It is recommended that no more than two dessert type items be served as a snack each week.
croissants	X		Group C Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	Croissants may be high in fat.
croutons	X		Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	





## Crediting Foods

Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
cupcakes	X		See: Cakes.	It is recommended that no more than two dessert type items be served as a snack each week.
Danish pastry	X		See: Sweet rolls.	It is recommended that no more than two dessert type items be served as a snack each week.
doughnuts	X		Homemade doughnuts are creditable for breakfast/snack only based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial doughnuts, unfrosted, use Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz For commercial doughnuts, frosted, glazed and/or filled, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	Doughnuts may be high in fat and sugar.  It is recommended that no more than two dessert type items be served as a snack each week.
dressing	X		See: Bread Stuffing	
dumplings	X		See: Batters	
egg roll or wonton wrappers	X		Group B Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	
English muffins	X		Group B Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	
French bread	X		See: Bread.	
French toast	X		Homemade French toast may be credited based on the amount of whole-grain, bran, germ and/or enriched bread in the recipe. For commercial French toast, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	





Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
fried bread	X		Fried bread may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe.	Fried bread is high in fat.
ginger bread	X		See: Cake.	It is recommended that no more than two dessert type items be served as a snack each week.
glorified rice	X		See: Rice pudding.	It is recommended that no more than two dessert type items be served as a snack each week.
grain fruit bars/fruit and cereal bars	X		Grain fruit bars may be credited for breakfast/snack only using Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	It is recommended that no more than two dessert type items be served as a snack each week.
granola bars	X		Granola bars may be credited for breakfast/snack only based on the amount of cereal and/or whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial granola bars, plain, use Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz For commercial granola bars with nuts, raisins, chocolate pieces and/or fruit, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	Granola bars may be high in sugar and fat. They can be a good source of fiber and complex carbohydrates.  It is recommended that no more than two dessert type items be served as a snack each week.
grits, corn, enriched	X		Corn grits must be enriched to be credited. If corn grits are served as a cooked cereal, use Group H. Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked If corn grits are used in a recipe: Ages 1-5: one serving = 7.38g Ages 6-12: one serving = 14.75g	



## Crediting Foods

Grains/Breads				
Creditable				
Food Item	Yes	No	Comments	Nutrition Information
hominy		X	Hominy is not creditable. It is not made from the whole kernel of corn and therefore, does not meet the criteria for grains/breads.	
hushpuppies	X		Homemade hushpuppies may be credited based on the amount of cereal and/or whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial hush puppies, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	
ice cream cones	X		Ice cream cones may be credited for snack only. It may take two or three cones to equal one serving. Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz )	It is recommended that no more than two dessert type items be served as a snack each week.
lefsa	X		Lefsa is a unleavened bread made primarily of potatoes and flour. Lefsa is often rolled with butter, brown sugar, jams, or cinnamon and sugar.  Lefsa is credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe.	
macaroni, all shapes	X		Macaroni must be whole-grain, bran, germ or enriched. Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
toast	X		Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	
millet	X		Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	



Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
muffins	X		Homemade muffins may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial corn muffins, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz For other muffins, use Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz	
nachos	X		See: Chips	
noodles	X		Noodles must be whole-grain, bran, germ or enriched. Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
nut or seed meal or flour		X	Nuts and seeds are not grains and there are no standards for enrichment.	
oat bran	X		If oat bran is used in a recipe: Ages 1-5: one serving = 7.38g Ages 6-12: one serving = 14.75g	
oatmeal	X		If oatmeal is served as a cooked cereal, use Group H. Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked If oatmeal is used in a recipe: Ages 1-5: one serving = 7.38g Ages 6-12: one serving = 14.75g	
pancakes	X		Homemade pancakes may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial pancakes, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	





## Crediting Foods

Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
party mix	X		Party mix may be credited based on the cereal content per serving. Group I Ages 1-2: one serving = 1/4 cup or 0.3 oz* Ages 3-5: one serving = 1/3 cup or 0.5 oz* Ages 6-12: one serving = 3/4 cup or 1 oz* *whichever is less	Some party mixes are high in salt.
pasta, all shapes	X		Pasta must be whole-grain, bran, germ or enriched. Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
pie crust	X		Homemade pie crust served in dessert pies, meat/meat alternate pies and turnovers may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial pie crust, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	Pie crust may be high in fat.  Dessert pies may be credited for snack only. It is recommended that no more than two dessert type items be served as a snack each week.
pineapple-upside-down cake	X		Upside-down cakes may be credited for snack only, based on the whole-grain, bran, germ and/or enriched meal or flour in the recipe. Crediting by weight may be impractical.	It is recommended that no more than two dessert type items be served as a snack each week.
pita bread	X		Group B Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	Pita bread is a good source of complex carbohydrates. Enriched pita is a good source of thiamin, riboflavin, thiamin and iron. Whole wheat pita can be high in fiber.
pizza crust	X		Homemade pizza crust may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. Commercial pizza crust may be credited using Group B. Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	



Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
Pop Tarts	X		See: Toaster pastry.	It is recommended that no more than two dessert type items be served as a snack each week.
popcorn		X	Popcorn does not meet the general requirements for grains/breads.	
popovers	X		Homemade popovers may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. Commercial popovers may be credited using Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	
potato chips or shoe string potatoes		X	Potato chips are not a grain-based chip and not creditable.	
potato pancakes		X	Potato pancakes contain a minimal quantity of flour.	
potatoes		X	See : Fruits and Vegetables.	Potatoes are a vegetable.
pound cake	X		See: Cakes.	It is recommended that no more than two dessert type items be served as a snack each week.
pretzel chips	X		See: Pretzels, hard.	
pretzels, hard	X		Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	
pretzels, soft	X		Soft pretzels may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe using Group B. Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	





## Crediting Foods

Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
puff pastry	X		Homemade puff pastry may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial puff pastry, use Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz	Puff pastry may be high in fat.
pumpernickel bread	X		See: Breads.	
pumpkin bread	X		See: Quick bread.	
quick bread	X		Homemade quick breads may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. Commercial quick breads may be credited using Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz	
quinoa	X		Quinoa is a cereal-like plant product. Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
raisin bread	X		See: Bread.	
ravioli	X		The pasta in homemade ravioli is creditable based on the amount of whole-grain, bran, germ or enriched meal or flour in the recipe. For commercial ravioli, use Group H. Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
rice, white or brown	X		Rice must be whole-grain or enriched. Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	Rice is a good source of complex carbohydrates.





Grains/Breads				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
rice cakes	X		Rice cakes must be enriched or whole-grain. Rice cakes which are made of puffed rice may be credited based on the serving size for cereal. Group I Ages 1-2: one serving = 1/4 cup or 0.3 oz* Ages 3-5: one serving = 1/3 cup or 0.5 oz* Ages 6-12: one serving = 3/4 cup or 1 oz* *whichever is less	
rice cereal bars	X		Rice cereal bars may be credited based on the amount of cereal in a serving Group I Ages 1-2: one serving = 1/4 cup or 0.3 oz* Ages 3-5: one serving = 1/3 cup or 0.5 oz* Ages 6-12: one serving = 3/4 cup or 1 oz* *whichever is less	It is recommended that no more than two dessert type items be served as a snack each week.
rice pudding	X		Rice pudding may be credited for snack only based on the amount of whole-grain or enriched rice in a serving.	It is recommended that no more than two dessert type items be served as a snack each week.
rolls, all varieties	X		See: Breads.	
Roman meal bread	X		See: Breads.	
rye wafers	X		Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	
scones	X		Homemade scones may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial scones, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	



## Crediting Foods

Grains/Breads				
Creditable				
Food Item	Yes	No	Comments	Nutrition Information
sopaipillas	X		Homemade sopaipillas may be credited for snack only based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial sopaipillas, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	It is recommended that no more than two dessert type items be served as a snack each week.
spoon bread	X		Spoon bread may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe.	
squash bread	X		See: Quick bread.	
stuffing, bread	X		See: Bread stuffing.	
sweet rolls, sticky buns, cinnamon rolls, Danish pastries, caramel rolls	X		Homemade sweet rolls may be credited for breakfast/snack only based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial rolls, unfrosted, use Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz For commercial rolls, frosted, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	These rolls may be high in fat and sugar.  It is recommended that no more than two dessert type items be served as a snack each week.
taco chips	X		See: Chips.	
taco shells	X		Group B Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	
tapioca pudding		X		Tapioca is not a grain.





## Grains/Breads

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
Toaster pastry	X		Toaster pastry may be credited for breakfast/snack only. For unfrosted toaster pastry use Group D. Ages 1-5: one serving = 25g or 0.9 oz Ages 6-12: one serving = 50g or 1.8 oz For frosted toaster pastry, use Group E. Ages 1-5: one serving = 31g or 1.1 oz Ages 6-12: one serving = 63g or 2.2 oz	It is recommended that no more than two dessert type items be served as a snack each week.
tortilla chips, wheat or corn	X		See: Chips	
tortillas, wheat or corn	X		Tortillas must contain whole-grain, bran, germ or enriched meal or flour. Group B Ages 1-5: one serving = 13g or 0.5 oz Ages 6-12: one serving = 25g or 0.9 oz	
turnovers	X		See: Pie Crust	Turnovers may be high in fat.  It is recommended that no more than two dessert type items be served as a snack each week.
waffles	X		Homemade waffles may be credited based on the amount of whole-grain, bran, germ and/or enriched meal or flour in the recipe. For commercial waffles, use Group C. Ages 1-5: one serving = 16g or 0.6 oz Ages 6-12: one serving = 31g or 1.1 oz	
wheat germ	X		If wheat germ is used in a recipe: Ages 1-5: one serving = 7.38g Ages 6-12: one serving = 14.75g	
wild rice	X		Group H Ages 1-5: one serving = 13g or 0.5 oz dry or 1/4 cup cooked Ages 6-12: one serving = 25g or 0.9 oz dry or 1/2 cup cooked	
zucchini bread	X		See: Quick bread.	
zwieback	X		Group A Ages 1-5: one serving = 10g or 0.4 oz Ages 6-12: one serving = 20g or 0.7 oz	





# Crediting Foods

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Notes:



## Fruits and Vegetables

CACFP regulations require that breakfast contain a serving of vegetable(s) or fruit(s) or full-strength vegetable or fruit juice, or an equivalent quantity of any combination of these foods.

Both lunch and supper must contain two separate servings of vegetables or fruits. Full-strength vegetable or fruit juice may be counted to meet not more than one-half of this requirement.

A serving of vegetable or fruit may be credited as one component of the required two components of a snack. Juice may not be credited as one of the components of a snack when milk is served as the only other component.

For information on juices, refer to "Understanding Food Labels: What's in a Food?"

Cooked dry beans or peas may be counted as a vegetable or as a meat alternate, but not as both in the same meal.

Small amounts (less than 1/8 cup) of vegetables and fruits, used as garnishes, may not be counted toward the vegetable/fruit requirement.

Fruit or vegetable dishes that contain more than one fruit or vegetable, such as fruit cocktail, mixed fruit or mixed vegetables, may be credited toward only one of the two required components for lunch and supper.

Home canned products are not creditable because of health and safety reasons. For more information on canned foods, contact your State agency, sponsor or county extension agent.







## Fruits and Vegetables

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
"ade" drinks (lemonade, limeade, etc.)		X	"Ade" drinks are not 100% full-strength juice.	"Ade" drinks are usually high in sugar.
apple butter		X	Apple butter does not contain enough fruit for crediting purposes.	
apple cider	X		Apple cider is a full-strength juice. Only pasteurized apple cider should be served.	
apple fritters, homemade	X		Apple fritters may be credited as part of the total requirement for fruits/vegetables if each serving has at least 1/8 cup of apples.	Apple fritters are high in fat.
aspic	X		See: Gelatin salads.	
banana bread		X	Fruit and vegetable breads, such as banana bread or zucchini bread, do not contain enough fruit/vegetable to be credited toward the fruit/vegetable requirement. They contain less than 1/8 cup per serving. See: Grains/Breads section for additional crediting information.	
banana pudding	X		Banana pudding may be credited based on the amount of fruit in each serving of pudding. Fruit may be credited as a fruit/vegetable if each serving has at least 1/8 cup of bananas.	
barbecue sauce		X	Barbecue sauce does not contain enough vegetable per serving to be credited.	Barbecue sauce may be high in salt. Choose lower sodium varieties or limit the use of barbecue sauces.
bean sprouts	X		Bean sprouts can be credited if at least 1/8 cup are served.	
beans, canned or dry	X		Beans and peas, canned or cooked from dry (kidney, garbanzo, black beans, etc.) may be credited as a vegetable. They cannot be credited toward the meat/meat alternate and the fruit/vegetable requirement in the same meal.	Beans and peas are good sources of protein, fiber and iron and are naturally low in fat.





## Fruits and Vegetables

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
beverages, fruit		X	Fruit beverages (, juice drinks, punches) contain less than 50% full-strength juice. Fruit drinks are primarily sugar, flavors and water.	
cake containing fruit	X		Cakes containing at least 1/8 cup fruit per serving can be credited. See: Pineapple Upside Down Cake in the grains/breads section for additional crediting information.	
carrot bread		X	See: Banana bread.	
catsup		X	There is not enough vegetable present to be credited.	
chili sauce		X	Chili sauce does not contain enough vegetable to be credited.	
coconut		X	Coconut does not contribute towards the meal pattern. Coconut is considered a nut or seed product.	In comparison to other fruits, coconut is high in fat with approximately 7 grams of fat per every 1/4 cup serving. Most other fruits have less than 1 gram of fat per serving.
coleslaw	X		Only the vegetable/fruit ingredients can be counted toward the fruit/vegetable requirement.	Cabbage is a good source of Vitamin C.
corn chips		X	See: Chips in grains/breads section.	Chips are high in fat and salt.
corn syrup		X	Corn syrup is primarily sugar and does not make a contribution to the fruit/vegetable requirement.	
cranberries	X			Cranberries are a good source of Vitamin C and fiber.
cranberry juice blend	X		Cranberry juice (not cocktail) in a blend with another full-strength juice is creditable (for example, 100% cranberry juice mixed with 100% apple juice). Cranberry juice (100%) that is not blended with other juices is not commercially available as a fruit juice.	



## Fruits and Vegetables

### Creditable

Food Item	Yes	No	Comments	Nutrition Information
cranberry juice cocktail		X	Cranberry juice cocktail contains less than 50% full-strength juice.	
cranberry relish or sauce	X		Only sauces with whole or crushed berries can be credited. Jellied sauces are up to half sugar and cannot be credited.	
drinks, fruit		X	Fruit drinks contain less than 50% full-strength juice. Fruit drinks are primarily sugar, flavors and water.	
dry spice mixes		X		
fig bar cookies		X	The amount of fig in the cookies is too small to count toward the fruit/vegetable component. See: Cookies in the grains/breads section for additional crediting information.	
frozen fruit flavored bars (commercial)		X	Frozen fruit flavored bars do not contain enough fruit juice to be creditable.	
frozen fruit juice bars (homemade or commercial)	X		The fruit juice portion of the bars may be counted to meet the fruit/vegetable requirement. Commercial fruit juice bars containing 100% juice can be credited. Other commercial fruit juice bars cannot be credited because it is impossible to determine the amount of fruit juice in each bar.	
fruit in breads or muffins (banana, carrot, cranberry, pumpkin, zucchini, etc.)		X	See: Banana Bread.	
fruit cobblers (homemade)	X		The fruit may contribute toward the fruit/vegetable requirement if one serving contains at least 1/8 cup fruit. See: Cobblers in the grains/breads section for additional crediting information.	Depending on the recipe, fruit cobblers may be high in sugar and fat.





## Fruits and Vegetables

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
Fruit crisps (homemade)	X		The fruit may contribute towards the fruit/vegetable requirement if one serving contains at least 1/8 cup. See: Fruit Pie Filling and Crisps in the grains/breads section for additional crediting information.	Fruit crisps may be high in fat.
fruit, dried	X		Check the Food Buying Guide for serving sizes of various dried fruits.	
fruit drinks		X	See: Drinks, fruit in this section.	
fruit flavored punch		X	Fruit flavored punch does not contain a sufficient amount of full-strength juice.	Fruit punch is high in sugar.
fruit flavored powders and syrups		X	Fruit flavored powders and syrups do not contain a sufficient amount of fruit to contribute toward the fruit/vegetable requirement.	Fruit flavored powders are primarily sugar and flavoring.
fruit juice bases		X	Fruit juice bases do not contain a sufficient amount of fruit per serving to contribute toward the fruit/vegetable requirement.	
fruit pie filling, commercial	X		If the first item listed in the ingredient list is fruit, the filling may provide one-half credit (1/2 cup of fruit pie filling will provide 1/4 cup of fruit credit).	The use of fruit pies and pastries to meet the fruit/vegetable requirement should be limited due to high fat and sugar contents.
fruit pie filling, homemade	X		In a homemade or center-made pie, the amount of fruit can be credited based on the amount of fruit in each serving.	The use of fruit pies to meet the fruit/vegetable requirement should be limited due to high fat and sugar contents.
fruit sauces, homemade	X		The fruit portion of the sauce may be credited. One serving must provide a minimum of 1/8 cup of fruit (2 Tbsp).	
fruit snacks		X	It is impossible to determine the amount of fruit in products such as fruit bars, roll-ups, wrinkles, or candy.	





## Crediting Foods

Fruits and Vegetables				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
gelatin salads or desserts with fruit/fruit juice/vegetable	X		The fruit/vegetable in gelatin salads or desserts may be credited toward the fruit/vegetable requirement if each serving contains a minimum of 1/8 cup fruit, vegetable or full-strength fruit or vegetable juice.	
gravy bases		X		
honey		X		
ice cream, fruit flavored		X	Fruit flavored ice cream contains an insufficient amount of fruit to credit toward the meal pattern.	
jam		X	Jam contains an insufficient amount of fruit per serving to credit toward the meal pattern.	Jams are high in sugar.
jelly		X	Jelly contains an insufficient amount of fruit per serving to credit toward the meal pattern.	Jellies are high in sugar.
juice bars	X		Juice bars made from 100% juice can be credited.	
juice blends - all fruit juice	X		Juice blends that are combinations of full-strength juices may be credited. Only pasteurized fruit juices should be served.	
ketchup		X	There is not enough vegetable present to be credited.	Ketchup has a high sodium content.
kiwi fruit	X		One kiwi equals 1/2 cup fruit.	Kiwi fruit is a good source of Vitamin C.
Kool-Aid		X	See: Fruit Flavored Powders.	
lefsa	X		Lefsa is an unleavened bread made primarily of potatoes and flour. Lefsa containing at least 1/8 cup of potato per serving is creditable as a fruit/vegetable. See: Lefsa in the grains/breads section for optional crediting information.	Lefsa is often served with butter, brown sugar, jams, or cinnamon and sugar. These toppings are high in fat and/or sugar.



## Fruits and Vegetables

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
lemon pie filling		X	Lemon pie filling contains an insufficient amount of fruit per serving.	
lemonade		X	For lemonade to be palatable, the lemon juice must be diluted beyond the 50% fruit juice level and sugar must be added.	
maple syrup		X		
mayonnaise		X		
muffins with fruit		X	See: Banana bread in this section.	
mustard		X		
nectar (apricot, pear, peach, etc.)		X	Nectars usually contain less than 50% full strength juice.	
oil, salad		X		
olives	X		Olives can be credited if each serving is at least 1/8 cup (2 tbsp).	Olives are high in salt and fat. This serving size is impractical for small children.
onion rings	X		Onion rings are creditable if they are homemade or if a product specification sheet is available which states the amount of onion.	Because they are fried, onion rings are high in fat.
pickles	X		Pickles can be credited if each serving is at least 1/8 cup (2 tbsp).	Pickles are high in sodium.
pickle relish		X	Pickle relish is considered a garnish or condiment.	
pineapple upside down cake	X		See: Cake Containing Fruit.	
pizza sauce	X		At least 1/8 cup (2 tbsp) per serving is needed. 1/8 cup of pizza sauce = 1/8 cup of vegetable.	
Pop Tart filling		X	See: Toaster Pastry Filling.	
popsicles		X	Popsicles do not contain a sufficient amount of fruit juice to be credited.	Popsicles are high in sugar.





## Crediting Foods

### Fruits and Vegetables

#### Creditable

Food Item	Yes	No	Comments	Nutrition Information
posole		X	Posole is a thick soup. It usually contains pork or chicken, broth, hominy, onion, garlic, dried chili peppers and cilantro.	
potato chips		X		Potato chips are high in fat and salt.
potatoes and potato skins	X			Potato skins are high in fiber. Potatoes and potato skins can be high in fat if fried. Toppings such as sour cream, cheeses, butter or margarine are also high in fat.
preserves		X	Preserves do not contain a sufficient amount of fruit per serving.	
pumpkin in bread		X	See: Banana bread.	
puddings with fruit	X		A serving must contain at least 1/8 cup or 2 tbsp of fruit per serving.	
raisins	X		1/4 cup of raisins equals 1/4 cup of fruit. Larger serving sizes may be impractical. Serve raisins with other fruits or vegetables.	Raisins are high in sugar (1/4 cup is equivalent to almost 3 Tbsp sugar). Raisins are high in iron and fiber.
rice		X	Rice is a grain. See: Rice in the grains/breads section for crediting information.	
salad dressing		X		
salsa	X		Salsa that contains all vegetable ingredients plus minor amounts of spices or flavorings is creditable. At least 1/8 cup (2 tbsp) per serving is needed. 1/8 cup of salsa = 1/8 cup of vegetable. If salsa contains non-vegetable components, like gums, starches or stabilizers, only the portion that is vegetable may be credited.	
sherbet		X	Sherbet does not contain a sufficient amount of fruit per serving to be creditable.	





## Fruits and Vegetables

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
sorbet	X		Sorbet made from 100% juice is creditable.	
soup, canned, condensed (1 part soup to 1 part liquid): clam chowder, minestrone, split pea, tomato, tomato with other basic components such as rice or vegetables, vegetable with other basic components such as meat or poultry	X		Based on reconstituted soup:  1 cup serving = 1/4 cup vegetable 1/2 cup serving = 1/8 cup vegetable  A serving of less than 1/2 cup soup does not contribute to the fruit/vegetable requirement.	Soups made from broths containing a variety of vegetables can be a nutritious, low-calorie main dish or accompaniment to a meal. Cream soups are high in fat. Some canned soups may be high in sodium.
soup, canned, ready-to-serve: clam chowder, minestrone, split pea, tomato, tomato with other basic components such as rice or vegetables, vegetable with other basic components such as meat or poultry	X		1 cup serving = 1/4 cup vegetable 1/2 cup serving = 1/8 cup vegetable  A serving of less than 1/2 cup soup does not contribute to the fruit/vegetable requirement.	Soups made from broths containing a variety of vegetables can be a nutritious, low-calorie main dish or accompaniment to a meal. Cream soups are high in fat. Some canned soups may be high in sodium.
soup, canned: beef (with vegetables and barley), beef, chicken or turkey noodle, chicken gumbo, chicken with rice or stars, cream of celery, cream of chicken, cream of mushroom, French onion, home-style beef or chicken, pepper steak, chicken corn chowder		X	Canned soups, such as these, do not contain a sufficient amount of vegetable to contribute toward the fruit/vegetable requirement.	Soups made from broths containing a variety of vegetables can be a nutritious, low-calorie main dish or accompaniment to a meal. Cream soups are high in fat. Some soups may be high in sodium.



## Crediting Foods

### Fruits and Vegetables

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
soup, dehydrated soup mixes	X		<p>Dehydrated vegetables may be credited. Yields for dehydrated vegetables must be based on the re-hydrated volume, not the dry volume stated on the label. Re-hydration yields vary from brand to brand.</p> <p>To determine the re-hydrated volume for vegetables:</p> <p>(1) Re-hydrate the dehydrated vegetable according to the manufacturer's directions by adding water or other liquid.</p> <p>(2) Measure the re-hydrated volume of the vegetables.</p> <p>(3) Calculate the number of servings provided.</p> <p>(4) Keep a record of yield data for referral.</p>	Dry soups may be high in sodium.
soup, homemade	X		When making homemade soups, use a quantity of vegetables that results in at least 1/8 cup (2 Tbsp) vegetable per serving.	
spaghetti sauce	X		At least 1/8 cup (2 tbsp) per serving is needed. 1/8 cup of spaghetti sauce equals 1/8 cup of vegetable.	
sprouts (alfalfa, bean, etc.)	X			
squash in bread		X	See: Banana Bread in this section.	
toaster pastry filling		X	These do not contain enough fruit to count toward the fruit/vegetable requirement. See: Toaster Pastry in the grains/breads section for additional crediting information.	
tomato paste	X		One tablespoon = 1/4 cup vegetable	
tomato puree	X		Two tablespoons = 1/4 cup vegetable	
tomato sauce	X		One-fourth cup = 1/4 cup vegetable	





## Fruits and Vegetables

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
V-8 juice	X		See: Vegetable Juice Blends.	
vegetable juice blends	X		Vegetable juice blends are mixed, full-strength vegetable juices.	Vegetable juice blends may contain a variety of nutrients. However, they may be high in sodium.
vegetable, chopped	X		Vegetables may be credited toward the meal pattern when at least 1/8 cup (2 tbsp) is provided per serving.	
vinegar		X		
wild plants	X		USDA does not recommend using wild plants due to the possibility of gathering look-alikes or poisonous plants. Mustard or dandelion greens, if used, should be purchased from a reputable commercial source.	Dark green leafy vegetables and greens are good sources of iron and vitamin A.
yogurt with fruit, commercial		X	Commercially prepared yogurt with fruit contains less than 1/8 cup fruit per serving. Fruit added to yogurt is creditable. See meat/meat alternates section for crediting yogurt.	
zucchini bread		X	See: Banana Bread in this section.	





## Crediting Foods

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Notes:



## Meat and Meat Alternates

CACFP regulations require that all lunches and suppers contain a serving of meat or meat alternates as specified in the meal pattern. Meat or meat alternates may also be served as one of the two components of a snack.

Meat includes lean meat, poultry or fish. Meat alternates include cheese, eggs, cooked dry beans or peas, nuts and seeds and their butters (except for acorn, chestnut and coconut), and yogurt. These foods must be served in a main dish, or in a main dish and one other item, to meet this requirement.

The usual serving size of meat or meat alternate for preschool (ages 1-5) children ranges from 1 to 1.5 ounces. To be counted

toward meeting any part of the meat/meat alternate requirement, a menu item must provide a minimum of 1/4 ounce of cooked lean meat or equivalent. The rest of the required serving must be met by adding other meat or meat alternates.

Nuts and seeds may fulfill no more than one-half of the meat/meat alternate requirement for lunch and supper or all of the meat/meat alternate requirement for a supplement.

Vegetable protein products may be counted as meeting part of the meat or meat alternate requirement. State agencies or sponsors can provide information on the preparation, serving and crediting of vegetable protein products.





## Meat/Meat Alternates

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
acorns		X		Acorns have a low protein content.
baco-bits		X		Baco-bits are low in protein and high in fat.
bacon and imitation bacon products		X		Bacon is low in protein and high in fat. Also, since the meat is cured and/or smoked, it is high in sodium.
bacon, turkey	X		See: Processed Meat and Poultry Products in this section.	
beans, canned or dry	X		Beans and peas cooked from dry may be credited as a meat/meat alternate. Canned black, garbanzo, kidney, pinto, etc. beans may be credited as a meat/meat alternate or as a fruit/vegetable, but not both. Canned green or yellow beans and green peas may be credited only as vegetables.	Beans and peas (those that can be credited as meat/meat alternates) are good sources of protein and fiber and are low in fat.
beef jerky	X		Beef jerky made with pure beef may be credited for snack only. The label should state: beef jerky chopped and formed, natural jerky, or beef jerky sausage.	Beef jerky does not serve the customary function of meat in a meal.  Beef jerky is very high in sodium.
bologna	X		See: Processed Meat and Poultry Products in this section.	Bologna, and other processed meats are commonly high in fat and sodium. Like all processed meats, bologna is lower in protein than fresh meat by weight.
Canadian bacon	X		One pound (16 oz) will yield 11 one-ounce servings of cooked meat. Refer to the Food Buying Guide or your State agency or sponsor for information.	Canadian bacon is high in sodium.
canned or frozen food, commercial: beef stew, chili mac, meat stew, pizza, pot pies, ravioli, etc.	X		These combination items are creditable only if (1) the food is CN labeled or (2) a product analysis sheet signed by an official of the manufacturer (not a salesperson), stating the amount of cooked lean meat/meat alternate in the product per serving, is on file.	Processed combination foods such as these are usually higher in fat and sodium than homemade foods.





## Meat/Meat Alternates

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
canned pressed luncheon meat (Spam)	X		See: Processed Meat and Poultry Products in this section.	Canned pressed luncheon meat is usually high in fat and sodium.
cheese, cottage	X		A two-ounce (1/4 c) serving of cottage cheese is equivalent to a one-ounce serving of meat.	Cottage cheese contains less protein per ounce; therefore, the required serving size is greater.
cheese, cream		X	Due to low protein and high fat content, a serving size that would provide enough protein would be excessive, especially for preschool children.	Cream cheese is high in fat and low in protein in comparison to other cheeses.
cheese food and cheese spread (Velveeta, Cheese Whiz, includes reduced fat, lite, or non-fat substitutes)	X		A two-ounce serving of these products is equivalent to a one-ounce serving of meat.	Cheese food and cheese spread are often high in sodium. Try to watch for lower sodium varieties. These foods are higher in moisture content and lower in protein content than natural cheeses.
cheese, imitation		X	Products labeled "imitation" are not creditable.	
cheese, natural or process (American, brick, Cheddar, colby, Monterey jack, mozzarella, Muenster, provolone, Swiss, includes reduced fat, lite or non-fat substitutes)	X		A one-ounce serving of natural or processed cheese is equivalent to one ounce of meat.	Some cheeses are high in fat and cholesterol. Cheese is a good source of protein, calcium, vitamin A and vitamin D.
cheese, Neufchatel		X	Due to low protein and high fat content, a serving size that would provide enough protein would be excessive, especially for preschool children.	Neufchatel cheese contains less protein and more fat than other creditable cheeses.
cheese, Parmesan	X		Six tablespoons equal one ounce of meat. If served as a garnish, the cheese is not creditable because the serving size is too small.	
cheese, pimento	X		A two-ounce serving of pimento cheese is equivalent to one ounce of meat.	
cheese products		X		Cheese product is a category name and is not standardized.



## Crediting Foods

Meat/Meat Alternates				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
cheese, ricotta	X		A two-ounce (1/4 c) serving of ricotta cheese is equivalent to a one-ounce serving of meat.	Ricotta cheese has less protein and a greater moisture content than natural cheeses per ounce.
cheese, Romano	X		Six tablespoons equals one ounce of meat. If served as a garnish, the cheese is not creditable because the serving size is too small.	
chestnuts		X		Chestnuts are very low in protein.
chicken nuggets	X		See: Processed Meat and Poultry Products in this section.	
chitterlings		X	Chitterlings have low protein content.	Chitterlings are high in fat.
coconuts		X	Coconut cannot be credited as a meat/meat alternate or a fruit/vegetable.	Coconut is very low in protein.
corn-dogs	X		The frankfurter can be credited as a meat/meat alternate if it meets criteria for frankfurters. See: Processed Meat and Poultry Products. See: Batter-Type Coatings in the grains/breads section for additional crediting information.	Corn-dogs are high in fat.
crab, imitation		X	See: Imitation Seafood in this section.	
cream cheese		X	See: Cheese, Cream in this section.	
deviled eggs	X		Cooked eggs may be credited. See: Eggs in this section.	Due to the egg and the addition of mayonnaise, deviled eggs are high in cholesterol and fat. Rather than preparing deviled eggs with mayonnaise, try a lower fat variety of the spread.
eggs	X		Cooked eggs may be credited. Eggs cannot be credited when part of a homemade custard or pudding.	Eggs are a good source of protein. However, eggs also contain a significant amount of cholesterol.
fish	X			Fish is a good source of protein and iron. Many varieties of fish are lower in fat than other types of meat. Try to broil or bake fish, rather than frying it which increases the amount of fat.





## Meat/Meat Alternates

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
fish, non-commercial (home caught)		X	For safety reasons, home-caught fish should not be served.	
fish sticks or nuggets	X		Only the edible fish portion is creditable toward the meat requirement.	
frankfurters, imitation		X		
frankfurters, meat and poultry	X		See: Processed Meats and Poultry Products in this section.	Up to 80% of the calories in frankfurters may be from fat. Also, they can be high in cholesterol, and are high in sodium.
game (venison, squirrel, rabbit, etc.)		X	For health and safety reasons, these are not creditable in the unless they are inspected and approved by the appropriate Federal, State, or local agency.	
garbanzo beans	X		See: Beans, Canned or Dry in this section.	
Ham hocks		X		Ham hocks are high in fat and low in protein by weight.
home-slaughtered meat		X	To be credited, home-raised animals must be slaughtered at a USDA facility that has a USDA inspector on duty. Poultry is subject to State inspection.	
hot dogs	X		See: Processed Meat and Poultry Products in this section.	
imitation seafood		X		
kidney	X			
kidney beans	X		See: Beans, Canned or Dry in this section.	
legumes	X		See: Beans, Canned or Dry in this section.	
liver	X			Liver is high in cholesterol and fat.
liverwurst	X		See: Processed Meat and Poultry Products in this section.	Liverwurst is high in fat and cholesterol.





Meat/Meat Alternates				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
luncheon meat	X		See: Processed Meat and Poultry Products in this section.	
macaroni and cheese, commercial		X	The powdered cheese in commercial macaroni and cheese mixes cannot be credited toward the meat requirement. To credit the macaroni, see Macaroni in the grains/breads section.	
macaroni and cheese, homemade	X		The cheese in homemade macaroni and cheese may be credited based on the amount of cheese in each serving. To credit the macaroni, see Macaroni in the grains/breads section.	
meat sauce, commercial		X	The meat in commercial sauce can not be credited.	
meat sauce, homemade	X		The meat in homemade sauce can be credited based on the amount of meat in each serving.	
Neufchatel cheese		X	See: Cheese, Neufchatel in this section	
nuts	X		Nuts and seeds may be credited as a serving of meat alternate for snack, but only one-half serving of meat alternate at lunch or supper. Serve only ground or finely chopped nuts and seeds to children under 3 years of age to avoid choking.	Nuts and seeds are good sources of protein. Nuts and seeds do not contain cholesterol, as they are of plant origin. However, nuts and seeds are high in fat and have low iron content.
nut or seed meal or flour		X	Nut or seed meal or flour cannot be credited unless it meets the requirements for vegetable protein products. Contact your State agency or sponsor for information.	
pasta products with meat, commercial	X		See: Canned or Frozen Food, Commercial in this section.	
pasta products with meat, homemade	X		Pasta products with meat may be credited based on the amount of meat in each serving. See: Pasta in the grains/breads section.	



## Meat/Meat Alternates

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
peanut butter, reduced fat	X		It is suggested that peanut butter be served in combination with another meat/meat alternate since the serving size may be too large for preschool children.	
peanut butter, regular	X		Unlike nuts, peanut butter and other 100% nut butters can fulfill 100% of the meat/meat alternate requirement for lunch or supper. However, it is suggested that peanut butter be served in combination with another meat/meat alternate since the serving size may be too large for preschool children.	Peanut butter is high in fat. It does not contain cholesterol as it is of plant origin.
peanut butter spreads		X	Peanut butter spreads do not meet the FDA Standard of Identity for peanut butter.	
peas, dry or canned	X		See: Beans, Dry or Canned in this section.	
pepperoni	X		See: Processed Meat and Poultry Products in this section.	Pepperoni is high in fat and sodium.
pig's feet		X	Pig's feet do not contain sufficient meat content.	Pig's feet are high in fat.
pig neck bones		X	Pig neck bones do not contain sufficient meat content.	Pig neck bones are high in fat.
pig tails		X	Pig tails do not contain sufficient meat content.	Pig tails are high in fat.
pimento cheese	X		See: Cheese, Pimento in this section.	
pinto beans	X		See: Beans, Canned or Dry in this section.	
pizza, commercial	X		See: Canned or Frozen Food, Commercial in this section.	
pizza, homemade	X		Homemade pizza may be credited based on the amount of meat/meat alternate in each serving. See: Pizza Crust in the grain/breads section.	





## Crediting Foods

Meat/Meat Alternates				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
Polish sausage	X		See: Processed Meat and Poultry Products in this section.	Polish sausage, like most sausage products, is high in fat and sodium.
pot pies, commercial	X		See: Canned or Frozen Food, Commercial in this section.	
pot pies, homemade	X		Homemade pot pies can be credited based on the amount of meat/meat alternate in each serving. See: Pie Crust in the grains/breads section.	The crust and sauce may both be high in fat.
potted meat	X		See: Processed Meat and Poultry Products in this section.	Potted meat is high in sodium.
powdered cheese in macaroni		X	See: Macaroni and Cheese, Commercial in this section.	
pressed meat products	X		See: Processed Meat and Poultry Products in this section.	Use pressed meat products infrequently as they are high in sodium.
processed meat and poultry products	X		Processed meat and poultry products and sausages may be served in the CACFP. Only the meat in these products can be credited. Since many processed meats contain large amounts of binders and extenders, the composition of these processed meats must be known in order to properly credit the meat/meat alternate portion. Meat products without binders/extendors may be fully credited based on weight. Refer to Some Things to Know About Processed Meats in the Understanding Food Labels section for more information on crediting meats with vegetable protein products as an extender. Products with a CN Label may be credited.	In order to provide a reasonable serving size, it is recommended that all-meat or poultry products be purchased.
quiche	X		The eggs, meat and/or cheese in quiche may be credited based on the amount of meat/meat alternate in each serving. See: Pie Crust in the grains/breads section for crediting the crust on quiche.	





## Meat/Meat Alternates

Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
ravioli, commercial	X		See: Canned or Frozen Food, Commercial in this section.	
salt pork		X	Salt pork is not creditable due to its high fat and low protein content.	
sausage	X		See: Processed Meat and Poultry Products in this section.	
scrapple		X	Scrapple does not contain a sufficient amount of meat to be credited.	
seeds	X		See: Nuts in this section.	
shellfish	X		Only the edible portion of shellfish is creditable. The shellfish must be fully cooked.	
soups, homemade	X		Homemade soups may contribute toward the meat requirement if a minimum of 1/4 oz. meat/meat alternate per serving is provided.	
soups, commercial (bean, lentil, or split pea only)	X		Three-fourths cup of bean, lentil, or split-pea soup may be credited as 1 1/2 oz (3/8 cup) meat alternate.	Commercial soups are often high in sodium.
soups, commercial, other than bean, lentil, or split pea		X	These soups contain insufficient quantities of meat.	
soy burgers or other soy products	X		Vegetable protein products may be credited provided the quantity, by weight, of the fully hydrated vegetable protein product does not exceed 30 parts to 70 parts meat, poultry, or seafood on an uncooked basis.	
soy butter	X		Soy butter made from 100% soy nuts is creditable. It is a good alternate to peanut butter for those who are allergic to peanuts and is nutritionally comparable to meat or other meat alternates. It is suggested that soy butter be served in combination with another meat/meat alternate since the serving size may be too large for preschool children.	



## Crediting Foods

Meat/Meat Alternates				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
tempeh		X	Tempeh is fermented soybean. Because there is no standard of identity for this food, and it could vary from manufacturer to manufacturer, it cannot be credited.	
tofu		X	Tofu is soybean curd. Because there is no standard of identity for this food, and it could vary from manufacturer to manufacturer, it cannot be credited.	
tripe	X			Tripe has low quality protein.
Vienna sausage	X		See: Processed Meat and Poultry Products in this section.	
yogurt, plain or sweetened and flavored	X		Yogurt is creditable as a meat/meat alternate. Four ounces (weight) or 1/2 cup (volume) of plain or sweetened and flavored yogurt is equivalent to one ounce of meat/meat alternate.	Yogurt is a good source of calcium and phosphorus.
yogurt products (frozen yogurt, yogurt bars, yogurt coating on fruit or nuts)		X	There is not enough yogurt in these products to be creditable.	





## Milk

The CACFP meal pattern requires fluid milk to be served for breakfast, lunch and supper. Additionally, fluid milk may be served as one of the meal pattern components for snacks.

To be credited, milk must be pasteurized, and meet State or local standards for fluid milk. Flavored or unflavored whole milk, reduced fat (2%) milk, low-fat (1%) milk, skim (nonfat) milk, or cultured buttermilk may be served. All milk should contain vitamins A and D at levels specified by the Food and Drug Administration.

At breakfast, fluid milk can be served as a beverage, used on cereal, or used in part for each purpose.

Both lunch and supper must contain a serving of fluid milk as a beverage.

If milk is one of the two components served for a snack, it must be fluid milk as a beverage or used on cereal, or used in part for each purpose. Milk may not be credited for snacks when juice is served as the only other component.

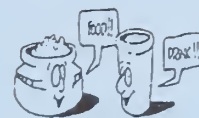
Milk may never be credited when cooked in cereals, puddings, or other foods.





## Crediting Foods

Milk				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
acidified milk	X		Acidified milk is a fluid milk produced by souring fluid milk with an acidifying agent. Examples of acidified milk include acidified kefir milk and acidified acidophilus milk.	
buttermilk	X			Buttermilk is low in fat.
certified raw milk		X	Certified raw milk is not pasteurized. Regulations require the use of pasteurized milk. Pasteurized milk is heated at a high temperature for a period of time to destroy microorganisms.	
cheese		X	Cheese cannot be credited toward the milk requirement as it does not meet the definition of milk. To be credited, the milk provided must be fluid. Cheese can be counted toward the meat/meat alternate requirement.	
chocolate milk	X			It is recommended that the use of flavored milk be limited due to the high sugar content.
cocoa	X		Cocoa made with fluid milk is creditable. Credit the fluid milk portion only. Cocoa made from water is not creditable.	
cream		X	Cream does not meet the definition of milk.	
cream sauces		X	To be credited, milk must be provided as a serving of fluid milk, not cooked in cereals, puddings, cream sauces or other foods.	
cream soups		X	To be credited, the milk must be provided as a serving of fluid milk, not cooked in cereals, puddings, cream sauces or other foods.	



Milk				
Food Item	Creditable		Comments	Nutrition Information
	Yes	No		
cultured milk	X		Cultured milk is a fluid milk produced by adding selected microorganisms to fluid milk under controlled conditions to produce a product with specific flavor and/or consistency. Examples of cultured milk include cultured buttermilk and cultured kefir milk.	
custard		X	To be credited, the milk must be provided as a serving of fluid milk, not cooked in cereals, puddings, cream sauces, or other foods.	
eggnog (commercial or homemade)	X		Eggnog made with cooked eggs is creditable. Only the fluid milk portion of eggnog may be credited. Eggnog made with uncooked eggs is NOT creditable due to the possibility of contracting Salmonella enteritidis, a foodborne illness related to the consumption of uncooked or undercooked eggs.	
eggnog flavored milk	X			It is recommended that the use of flavored milks be limited due to a high sugar content.
evaporated milk		X	Evaporated milk does not meet the definition of milk.	
flavored milk	X			It is recommended that the use of flavored milks be limited due to a high sugar content.
frozen yogurt		X	Frozen yogurt does not meet the definition of milk.	
goats milk	X		Goats milk must meet State standards for fluid milk to be creditable.	
half and half		X	Half and half does not meet the definition of milk.	
hot chocolate	X		Hot chocolate made with fluid milk is creditable. Credit the fluid milk portion only.	It is recommended that the use of flavored milks be limited due to a high sugar content.
ice cream		X	To be credited, milk must be provided as fluid milk.	Ice cream contains 11-20% fat.





## Crediting Foods

Milk				
Creditable				
Food Item	Yes	No	Comments	Nutrition Information
ice cream, low-fat (ice milk)		X	To be credited, milk must be provided as fluid milk.	Low-fat ice cream contains 2-6% fat.
imitation milk		X	Imitation milk does not meet the definition of milk.	
milk and fruit drink	X		When milk is combined with a full-strength juice, either the fruit juice or milk may be credited as a snack component not both.	
lactose reduced milk	X		Persons who cannot digest lactose found in standard milk may be able to drink lactose reduced milk	
low-fat milk (1% or light)	X		The American Academy of Pediatrics and health and nutrition experts do not recommend serving reduced fat, low-fat or nonfat milk to children under two years of age. Children under the age of two need additional fat in their diets for normal growth and development.	Whole, reduced fat, low-fat, and nonfat milk provide equal amounts of the same nutrients. The difference is the fat content and therefore, the number of calories per serving.
milkshakes, homemade and commercial	X		Milkshakes containing the minimum required quantity of fluid milk per serving for the appropriate age group are creditable. Only the fluid milk portion is creditable.	
nonfat milk (fat free or skim)	X		The American Academy of Pediatrics and health and nutrition experts do not recommend serving reduced fat, low-fat or nonfat milk to children under two years of age. Children under the age of two need additional fat in their diets for normal growth and development.	Nonfat milk contains virtually no fat. Nonfat milk provides equal amounts of the same nutrients as whole, reduced fat, and low-fat milk.
nonfat dry milk, reconstituted		X	Nonfat dry milk may be used only in emergency situations where the availability of milk has been affected. Contact your State agency or sponsor for approval.	
pudding		X	To be credited, milk must be provided as a serving of fluid milk, not cooked in cereals, puddings, cream sauces or other foods.	
pudding pops		X	To be credited, milk must be provided as a serving of fluid milk.	





Milk				
Creditable				
Food Item	Yes	No	Comments	Nutrition Information
reduced fat milk (2%)	X		The American Academy of Pediatrics and health and nutrition experts do not recommend serving reduced fat, low-fat, or nonfat milk to children under two years of age. Children under the age of two need additional fat in their diets for normal growth and development.	Whole, reduced fat, low-fat, and skim milk provide equal amounts of the same nutrients. The difference is the fat content and therefore, the number of calories per serving..
sherbet		X	Sherbet does not meet the definition of milk.	
skim milk (nonfat or fat free)	X		The American Academy of Pediatrics and health and nutrition experts do not recommend serving reduced fat, low-fat or nonfat milk to children under two years of age. Children under the age of two need additional fat in their diets for normal growth and development.	Skim milk contains virtually no fat. Skim milk provides equal amounts of the same nutrients as whole, reduced fat, and low-fat milk.
sour cream		X	Sour cream does not meet the definition of milk.	Sour cream is high in fat. A sour cream substitute recipe that is lower in fat is provided in the Modifying Recipes and Menus Section.
soy milk		X	Soy milk is creditable only if used as a substitution because of medical or other dietary needs. A statement signed by a medical authority must be on file for a person being served soy milk.	
UHT (ultra-high temperature) milk	X		UHT milk is Grade A pasteurized milk heated to 280 °F, then cooled. It can be stored without refrigeration until it is opened.	
whole milk	X			Whole milk contains 3.3% fat. Reduced fat, low-fat, or skim milk provide equal amounts of the same nutrients with less fat.
yogurt		X	Yogurt does not meet the definition of milk. Yogurt can be credited as a meat alternate. See: Yogurt in the meat/meat alternate section.	Yogurt is a good source of calcium, phosphorus and protein.



## Crediting Foods

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Notes:





## Infant Foods

Meals served to children under 12 months of age must follow the infant meal pattern. A copy of the infant meal pattern is in the Feeding Infants chapter.

Child care facilities should work closely with parents when deciding what foods to serve infants. Likewise, the decision to introduce solid foods should be made with parents.

Because infants have small appetites and may not be able to eat a complete meal in one setting, foods required by the infant meal pattern may be served to infants over a period of time.

For more information, refer to the section, "Feeding Infants" or the publication, *Feeding Infants* (FNS-258).





## Infant Foods

See the Infant Meal Pattern Chart for Serving Sizes

### Creditable

Food Item	Yes	No	Comments	Nutrition Information
bread	X		Bread, including dry bread, toast, biscuits, bagels, English muffins, pita bread, rolls, and soft tortillas, may be claimed in supplements for infants 8-11 months of age. Bread must be made from whole-grain, bran, germ and/or enriched meal or flour to be creditable. Bread should not contain nuts, seeds, or hard pieces of whole grain kernels.	
breast milk	X		Meals containing breast milk may be claimed when the infant is 4 months of age or older and when the facility is providing at least one other meal item.	Breast milk is the best food for infants. It provides energy and all important nutrients in appropriate amounts for infants.
cereal, adult		X	"Adult" cereals, including oatmeal and Farina, are not creditable for infants.	Iron and other nutrients in "adult" cereals are provided to meet the needs of older children and adults rather than infants. Raisins and nuts in "adult" cereals may cause choking.
cereal, infant with fruit		X	It is difficult to determine the amount of cereal and fruit.	
cereal, iron-fortified infant	X		Iron-fortified dry cereals specially formulated and recognized for infants are creditable.	The iron in iron-fortified infant cereals is designed to be easily absorbed by infants.
cheese (natural cheese, cottage cheese, cheese food, cheese spread)	X		Natural cheese, cottage cheese, cheese food and cheese spread may be claimed when served at lunch or supper to infants 8-11 months of age.	
chocolate		X	Chocolate should not be served to infants under one year of age as it may cause allergic reactions.	
combination dinners/foods, commercial baby food		X	The amount of each component in combination meals is difficult to determine. After measuring the appropriate amount of each item, plain meats may be mixed with vegetables.	Commercial combination baby food dinners/foods have less nutritional value by weight than single ingredient foods.



## Infant Foods

See the Infant Meal Pattern Chart for Serving Sizes

Creditable

Food Item	Yes	No	Comments	Nutrition Information
crackers	X		Crackers, including saltine, snack or matzo crackers, animal crackers and graham crackers, may be credited as snack only when served to developmentally ready infants 8-11 months of age. Crackers must be made from whole-grain, bran, germ and/or enriched meal or flour. Crackers should not contain nuts, seeds, hard pieces of whole grain kernels, or honey.	
desserts, baby food		X		Desserts may be high in sugar and/or fat and often contain less of the key nutrients needed by infants.
egg white		X	Egg whites should not be served to infants less than one year of age because they may cause allergic reactions.	
egg yolk	X		Egg yolk may be claimed when served at lunch or supper to 8-11 month old infants. Commercial baby food egg yolk or properly cooked and prepared (pureed or mashed) egg yolk may be served.	
fish sticks		X	Fish sticks and other commercial breaded or battered fish or seafood products are not intended for infant consumption. These foods may cause choking.	
formula, follow-up	X		Follow-up formulas are designed for older infants or toddlers consuming solid foods. Follow-up formulas are creditable when served to infants 6 months of age or older. Follow-up formulas are not creditable when served to infants less than 6 months of age, except when served as substitutions supported by a medical statement.	





## Infant Foods

See the Infant Meal Pattern Chart for Serving Sizes

### Creditable

Food Item	Yes	No	Comments	Nutrition Information
formula, iron-fortified or with iron	X		<p>Iron-fortified infant formulas, including soy-based formulas, may be served.</p> <p>Iron-fortified formula recommended by the infant's health care provider should be served.</p> <p>The American Academy of Pediatrics recommends that, during the first year of life, the only acceptable alternative to breast milk is iron-fortified infant formula and that low-iron formulas not be used.</p>	Iron-fortified infant formula contains 1 milligram or more of iron in a quantity of product that supplies 100 kilo-calories when prepared in accordance with label directions for infant consumption. The amount of iron in a product is specified on the label.
formula, low-iron		X	Only iron-fortified infant formula is creditable	Low-iron infant formulas contain less than 1 milligram of iron per 100 kilo-calories of formula. Infants need to receive an adequate amount of iron in the first year to maintain health.
formula, powdered	--	--	Powdered infant formula may or may not be creditable in some States due to State licensing regulations.	
fruit	X		Raw fruits may cause choking if not prepared (cooked, if necessary, and/or pureed or mashed) to the appropriate texture for an infant. Plain commercial baby food fruits may be claimed when served at lunch or supper to infants 4-7 months old, or when served at breakfast, lunch or supper to infants 8-11 months old.	
fruit and vegetable juice blend		X	Fruit and vegetable juice blends are not creditable for infants. Only 100% fruit juices are creditable for infants.	
fruit drink		X	Fruit drinks are not creditable. Juices must be 100% fruit juice to be credited.	Fruit drinks are high in sugar.



## Infant Foods

See the Infant Meal Pattern Chart for Serving Sizes

Creditable

Food Item	Yes	No	Comments	Nutrition Information
fruit juice	X		Full-strength (100%) fruit juice, including infant and adult varieties, may be claimed when served to infants when they are ready to drink the juice from a cup.	Choose juices that are fortified with vitamin C.
fruit punch		X	Fruit punch is not creditable	Fruit punch is high in sugar
home-canned infant foods		X	Home-canned infant foods should not be served due to the risk of food borne illness.	
honey		X	Honey (including that cooked or baked in products such as honey graham crackers) should not be served to infants less than one year of age. Honey is sometimes contaminated with Clostridium botulinum spores. If these spores are ingested by a baby, they can produce a toxin which may cause severe food-borne illness called infant botulism.	
hot dogs (frankfurters)		X	Hot dogs are not intended for infant consumption. Hot dogs may cause choking.	
juice	--	--	See: Fruit and Vegetable Juice Blend, Fruit Juice or Vegetable Juice in this section.	
Legumes (dry or canned beans and peas)	X		Cooked dry beans and dry peas may be claimed when served at lunch or supper to infants 8-11 months of age. Dried or canned legumes should be prepared (mashed or pureed) to the appropriate texture for infants. Whole cooked legumes may cause choking in infants.	





## Infant Foods

See the Infant Meal Pattern Chart for Serving Sizes

### Creditable

Food Item	Yes	No	Comments	Nutrition Information
meat	X		Plain commercial baby food meats may be claimed when served at lunch or supper to infants 8-11 months of age. Fresh or frozen meats should be cooked thoroughly and then prepared (pureed, ground or finely chopped) to the appropriate texture for infants.	
meat sticks (finger sticks)		X	Meat sticks are not intended for infant consumption. Meat sticks may cause choking.	
milk, low-fat (1% or light)		X	Low-fat milk is not creditable for infants.	Low-fat milk should not be served to infants. Babies need adequate amounts of fat for normal growth and development.
milk, nonfat (fat free or skim)		X	Nonfat milk is not creditable for infants.	Nonfat milk should not be served to infants. Babies need adequate amounts of fat for normal growth and development.
milk, reduced fat (2%)		X	Reduced fat milk is not creditable for infants.	Reduced fat milk should not be served to infants. Babies need adequate amounts of fat for normal growth and development.
milk, whole	X		Whole milk may be claimed when served to infants 8-11 months of age. The American Academy of Pediatrics recommends that, during the first year of life, the only acceptable alternative to breast milk is iron-fortified infant formula and that whole cow's milk not be used.	Whole milk unlike breast milk and formula, does not contain all nutrients needed for an infant's growth and development. Also, whole milk can place stress on an infant's kidneys, cause allergic reactions, and cause blood loss through the intestines which can lead to iron deficiency anemia.
nuts		X	Nuts, seeds, and nut and/or seed butters may cause choking or an allergic reaction and should never be served to infants.	
peanut butter		X	Peanut butter should not be served to children less than one year of age because it may cause choking or an allergic reaction.	





## Infant Foods

See the Infant Meal Pattern Chart for Serving Sizes

Creditable

Food Item	Yes	No	Comments	Nutrition Information
shellfish		X	Shellfish may cause allergic reactions infants less than one year old.	
soy formula	X		See: Formula, Iron-Fortified or with Iron in this section.	
vegetables	X		Plain commercial baby food vegetables may be claimed when served to infants 4-7 months old at lunch or supper and infants 8-11 months old at breakfast, lunch or supper. Fresh or frozen vegetables should be cooked and then prepared (pureed or mashed) to the appropriate texture for infants. Raw vegetables are not recommended for infants because they may cause choking.	
vegetable juice		X	Vegetable juice is not creditable for infants. Only 100% fruit juices are creditable toward the infant meal pattern requirements.	
yogurt		X	Yogurt is not creditable for infants. Yogurt may be served as an additional food if a parent requests that it be served.	
zwieback	X		See: Crackers in this section.	



## Crediting Foods

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Notes:









# Glossary

**Allergy:** An allergy is a reaction to a foreign substance in which antibodies are produced. Common side effects include runny nose, red eyes and rashes.

**Ascorbic acid:** Ascorbic acid is one of the active forms of Vitamin C.

**Aspartame:** This is the generic name for a non-caloric artificial sweetener that is sold under trade names such as NutraSweet and Equal.

**Body Mass Index (BMI):** BMI is a screening tool that uses weight in relation to height to determine a person's risk of obesity.

**Bran:** The bran is the fiber-rich part of a grain. Bran makes up about 14.5 percent of the kernel weight. Bran is included in whole-wheat flour and can also be purchased separately. The bran contains protein, large quantities of the three major B-vitamins (thiamin, riboflavin and niacin), trace minerals and dietary fiber.

**Calorie:** A calorie is the measurement for energy in foods.

**Carbohydrates:** Carbohydrates are compounds composed of single sugars. They provide energy for the body.

**Child and Adult Care Food Program (CACFP):** The Child and Adult Care Food Program (CACFP) is a USDA program which provides reimbursement and USDA-donated foods to day care centers, family day care homes, Head Start centers, and adult day care centers so that nutritious meals can be provided to participants.

**Child Nutrition (CN) Label:** A CN label states a product's contribution to the meal pattern

requirements. CN labels are available for meat/meat alternates and fruit juices that contain greater than 50% real fruit juice. For more information, see the section on food labeling in this manual.

**Cholesterol:** Cholesterol is manufactured by the body for a variety of purposes. Cholesterol is found only in animal foods, such as meat and cheese.

**Combination food:** Any single serving of food that contains two or more of the required meal components is considered a combination food. For more information on crediting combination foods, see the sections in this book on recipe evaluation, food labeling, and crediting foods.

**Complex carbohydrates:** Complex carbohydrates are long chains of sugars arranged as starch or fiber.

**Component:** A food grouped in a certain food category according to the CACFP Meal Pattern. Milk component, meat/meat alternate component, fruit/vegetable component and the grains/breads component are examples.

**Diabetes:** Diabetes is a disorder in which the body is unable to produce or respond to insulin. See the section in this manual on nutrition for more information.

**Empty calorie food:** This is a popular term describing foods that have only minimal nutrient value and many calories.

**Emulsifiers:** Emulsifiers are chemicals that attract both fats and oils and help mix fats and oils. Emulsifiers include lecithin (an egg yolk protein), monoglycerides, diglycerides, and propylene glycol esters.





**Endosperm:** The endosperm is the bulk of the edible starchy part of a grain. Endosperm makes up 83 percent of the kernel weight and is the source of white flour. The endosperm contains the greatest share of protein, carbohydrate and iron as well as B-vitamins.

**Enrichment:** Enrichment refers to the addition of nutrients to a food. The term may specifically indicate that thiamin, riboflavin, niacin and iron were added to refined grains or bread products.

**Enzymes:** Enzymes are made of proteins and are catalysts for many chemical reactions in the body.

**Fat:** Fat is a storage form of energy. See the sections in this manual on nutrition, recipe and menu modification and food labeling for more information.

**Fiber:** Fiber is the non-nutrient component of foods that aids in digestion and helps prevent constipation.

**Food and Nutrition Service (FNS):** The Food and Nutrition Service is the Federal administering agency for the Child and Adult Care Food Program. It is a division of the United States Department of Agriculture. The FNS develops regulations, policies and publications and provides supervision necessary to administer the CACFP.

**Food Buying Guide:** The *Food Buying Guide for Child Nutrition Programs* is the principle tool used to determine the contribution foods make toward the meal pattern requirements. The guide gives average yield information for over 600 creditable food items. The Food Buying Guide is most helpful to schools and some child care centers that prepare meals for a large number of children since the food yield data is given primarily for quantities of 100 servings.

**Food poisoning:** Food poisoning is the illness transmitted to humans through a poisonous substance in food.

**Fortification:** Fortification refers to the addition of nutrients to a food, often not originally present, and/or added in amounts greater than might be found there naturally.

**Germ:** The germ is the nutrient-rich inner part of a grain. It makes up about 2.5 percent of the kernel weight. The germ is the embryo or sprouting section of the seed. It is often separated from flour during milling because the fat content (10%) limits flour's shelf-life. The germ contains protein, B-vitamins and trace minerals. Germ can be purchased separately and is part of whole-wheat flour.

**Glucose:** Glucose is a single sugar used in both plants and animals as a quick energy source. Glucose is known as blood sugar.

**High density lipoprotein (HDL):** HDLs return cholesterol from storage places to the liver for dismantling and disposal.

**Home canned foods:** For safety, home canned foods are not allowed in meals reimbursed under the CACFP. The dangerous organism, *Clostridium botulinum*, that produces the deadly botulinum toxin can grow in home canned foods. An amount of the botulinum toxin as tiny as a single crystal of salt has the potential to kill several people within an hour, and survivors can still suffer the effects months or even years later. Even when there is no evidence of spoilage, the toxin may be present.

**Imitation:** Imitation foods are processed foods that resemble ordinary foods, but are lower in essential nutrient(s), including protein.

**Infant cereal:** Infant cereal is cereal specially formulated for and generally recognized as cereal for infants. It is routinely mixed with formula or milk before serving to infants.

**Infant formula:** Iron fortified infant formula is intended for dietary use as a sole source of food for normal, healthy infants. It is served in a liquid state at the manufacturer's recommended dilution.





**Insulin:** Insulin is a hormone secreted by the pancreas in response to high blood glucose levels; it assists cells in drawing glucose from the blood.

**Lactase:** Lactase is an enzyme that splits lactose into digestible parts.

**Lactose:** Lactose is a disaccharide composed of glucose and galactose. Lactose is known as "milk sugar."

**Lactose intolerance:** Lactose intolerance is the inability to digest lactose, due to a lack of the enzyme, lactase.

**Leavening agents:** Leavening agents are added to bread and grain products to make them light in texture and full in volume. Examples include yeast and baking powder.

**Legumes:** Legumes are plants of the bean and pea family that are rich in protein and fiber.

**Lipid:** Lipids are the family of compounds that include triglycerides (fats and oils), phospholipids and sterols.

**Lipoprotein:** Lipoprotein are clusters of lipids that serve as transport vehicles for lipids in the **blood and lymph**.

**Low density lipoprotein (LDL):** LDLs transport lipids from the liver to other tissues (fat and muscle).

**Monosaccharide:** A monosaccharide is a single unit of sugar.

**Nutrients:** Nutrients are components of food that help nourish the body. They include carbohydrates, fats, proteins, vitamins, minerals, and water.

**Obesity:** Obesity is the condition of having too much body fat. Body weight is usually 20% or more above desirable levels. Many health problems are associated with obesity.

**Oils:** Oils are lipids that are liquid at room temperature. Oils are unsaturated fats.

**Osteoporosis:** Osteoporosis is known as "adult bone loss." It is a disease in which bones become porous and brittle.

**Overweight:** Overweight is usually defined as body weight 10% to 20% above desirable levels.

**Pasteurization:** Pasteurization is the treatment of milk with heat, sufficient to kill certain disease-causing microbes.

**Product specification sheet (sometimes called a product analysis sheet):** This is a product information sheet obtained from the manufacturer detailing the ingredients by weight or by percentage weight of the product. It must have an original signature of a company official. For more information on product specification sheets and crediting commercially prepared combination foods, see the section on food labeling.

**Proteins:** Proteins are energy-yielding nutrients made of amino acids.

**Recommended Dietary Allowance (RDA):** RDAs are the nutrient intakes suggested by the Food and Nutrition Board (FNB) of the National Academy of Sciences/National Research Council for the maintenance of health in people in the U.S.

**Refined grains:** Refined grains have the coarse parts of the kernel removed. They are often enriched.

**Roughage:** Roughage is the rough part of foods that is indigestible. It aids in digestion and preventing constipation.

**Serving size or portion:** The portion size is described by the weight, measure or number of pieces or slices. The serving sizes specified in the meal patterns must be provided to meet the meal pattern requirements.



**Standards of identity:** Standards of Identity are U.S. government standards for content, preparation, and labeling of food before it is manufactured and sold in commerce. Standards of Identity specify ingredients a food must contain when a product is to be labeled or identified by a common product name. Standards for meat and poultry products are developed by the Department of Agriculture. For other food products, standards are set by the U.S. Food and Drug Administration (FDA).

**Starch:** Starch is a plant polysaccharide composed of glucose. Starch is found in breads, potatoes, and pasta products.

**Tofu:** Tofu is a curd made from soybeans, rich in protein and calcium. Tofu is used in many Asian and vegetarian dishes in place of meat.

**Vegetable Protein Products (VPP):** Vegetable protein products are food components which may be used to substitute, in part, for meat, poultry, or seafood in some cases. Contact your State Agency or sponsor for more information.

**Very low density lipoprotein (VLDL):** VLDLs are made in the intestine and liver and transport lipids to other body organs.

**Whole grain flours and cereals:** Products made from whole grains containing the bran, germ and endosperm of the whole kernel of grain.

